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A study was made to determine the attitudes of elementary public school teachers and administrators toward education as a lifelong process and the possibility of isolating, testing, and changing adult attitudes to encompass new concepts. Full time elementary school personnel (455) in Albany and Laramie counties completed a tested adult attitude scale. From these, 88 were selected for the experimental study; and of these 88, 41 completed the experiment. In Albany county, 12 of the 41 persons met in two sessions with a film, lecture, and small group discussions; while 29 from Laramie county received the information only through the mail in written form. Both methods of disseminating information about the tested concepts on the attitude scale were significantly effective in changing total scores in the low and high groups. Neither method showed greater effectiveness when comparing changes between low and high groups. However, the Albany county method of small group discussion produced a significantly greater change in total scores than did the Laramie county method of mailed information. (A bibliography and the questionnaires used are included.) [Not available in hardcopy due to marginal legibility of original document] (author/nl)

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A STUDY OF ELEMENTARY PUBLIC SCHOOL PERSONNEL ATTITUDES TOWARD CONTINUING EDUCATION IN SELECTED COMMUNITIES IN WYOMING: AN EXPERIMENT IN CHANGING ADULT ATTITUDES AND CONCEPTS

by

Arthur W. Burrichter

A Project Report
Submitted to the Department of
Adult Education and Instructional Services and
the Graduate School of the University of Wyoming in
Partial Fulfillment of Requirements for the Degree of
Doctor of Education

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in partial fulfillment of the requirements
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Dean of the Graduate School.

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CHAPTER I

INTRODUCTION

Education must be continuous throughout life. Scientific and technological progress demand constant updating of skills. Schools, homes, churches, and businesses remain in constant flux. An individual is never completely prepared for all problems of living in today's world. Because of this continual change, adult and continuing education programs are necessary or obsolescence takes over for those unwilling to further their learning.

Schools have not adequately developed among young people the concept that we are living in a fast-moving and changing world. Individuals either remain alert to new ideas and changes in living or they soon become laggards in life. The time lapse between new ideas and their inclusion in the educational system must be shortened, lest students in the years ahead be shortchanged as they have in the past.

Little doubt remains that public education has not effectively prepared its students for lifelong learning. Dropout rates are very high, and more student unrest exists than has been known to date. One reliable study found that an additional 7.5 million dropouts will join the ranks of unskilled laborers by 1970. These millions have been cheated out of much that is considered a reasonable American standard of living, simply because they have not prepared themselves to deal with complex problems in a changing world.

To further complicate the problem, the life-span of the average American is steadily increasing. This means the additional number of productive years could run into millions. Yet these will be lost unless some methods are effectively initiated to train this vast human potential for living in the twenty-first century.

To say the efforts of society have not been effective for huge numbers of Americans is to admit failure, but nothing constructive is accomplished by dwelling on past mistakes. Our vision must be toward the future, and how best to prepare those multitudes in school now and the coming years. Re-evaluation of priorities in public elementary education is essential, for educators have too long concentrated on areas that were of concern to our ancestors. The three R's are still important, and they must be mastered, but the more basic concept to be instilled in all humans must be a realization that learning, of one sort or another, is a basic lifelong goal and process. To pass from the formative years of childhood into adulthood without a realization that life, society, homes, schools, leisure time, and occupations are constantly changing is to enter adulthood with a crippling handicap, that of not knowing until too late that the world is changing rapidly while the "individual" is becoming obsolete.

The future of society is not now shaped, nor will it be, by single groups or forces. The days of a rural-agrarian society and economy no longer exist. The destiny of society will be shaped by many forces--social as well as economic, ideological as well as technological. These forces are all subject to human intervention, and as such must be directed by adults who live and believe that adult learning is not optional to our democratic society.

The adults who are today charged with a great responsibility for future learning are the professional educators. They simply cannot view the future in terms of an outmoded present and past when working with school-age young people. Their outlook as professional persons and their attitudes must encompass education as a desirable lifetime process. They must realize that education in the public schools can no longer serve the lifetime needs of society. We must commit more of our educational effort to the education of adults. This requires a clientele receptive to continuing education and who will wholeheartedly support its program. As the professional educator becomes aware of continuing education, and instills this in his students, this clientele will become available.

The attitudes that exist among professional elementary school educators toward continuing education are uncertain. Observation leads one to believe that a number of teachers and administrators are well aware of the need for continuing education as evidenced by their personal and professional lives. Others apparently make little or no attempt to further their education unless required to do so by school boards or state laws. The necessity for determining what now exists in teacher attitudes is apparent before changes can be made or recommended. It is essential that elementary personnel be made cognizant of the need to nurture continuing education concepts in the youngest children. These are truly the formative years for educational ideas as well as the three R's.

The degree to which teacher attitudes are instilled in children by example and sincere teaching efforts has not been established. This writer feels that elementary personnel attitudes, examples, and teaching efforts are more significant in attitude development than has been realized. Anyone who doubts that teachers really exert both positive and/or negative influences on the classroom attitudes of children has not carefully observed the development of children's attitudes.

Teacher attitudes strongly affect classroom atmosphere and the performance of children in those classrooms. For years psychologists, administrators and parents have told of the difference one teacher has had over another on children. A conducive atmosphere which instills a desire to continue learning is upheld as the ideal classroom. The teacher that can help children relate to life, their peers, and to want to continue learning is cited as the "outstanding teacher" and often given meritorious ratings and pay increments. Positive teacher attitudes appear to be a key element in creating the most conducive learning situations for children.

Adult attitudes can be changed in various ways. No doubt remains that certain methods have been more effective than others in bringing about attitudinal change in adults. No one has, however, established the feasibility of changing elementary personnel attitudes toward the concept of continuing education. It is not known if these attitudes can be changed, and if so which method is superior to another. The degree to which a change in adult teacher attitudes affects classroom attitudes and ultimately individual pupil attitudes is not clear. This vital area lacks significant research from which to make clear predictions or generalizations.

American education in the past has seemed clumsily big, slow, and defensive. What is really needed for the present and future is a new type of education that will be vitally in tune with the twenty-first century when it arrives. The educational system must be alert and adaptive to a changing world if democracy is to survive.

Adults, no doubt, will continue to prepare and reprepare in related trades and skills in order to remain employed during their employable years. These areas, when added to the constantly changing everyday activities of living such as child raising, food preparation, and leisure time activities make it essential that continuing education become an integral part of our schools and society.

Young people must realize that education is lifelong, continuous and rewarding. The homes and schools of this nation must certainly share in the formation of these concepts. This research was directed toward the part elementary public school teachers and administrators may play in the formation of such vital learning. It isolated elementary personnel attitudes toward continuing education and experimented with changing these attitudes.

PURPOSE OF THE STUDY

The purpose of this study was to determine the attitudes which elementary public school teachers and administrators held toward education as a continuing and lifelong process. It was to determine if adult attitudes can be isolated, tested, and changed to encompass new concepts. Two varying methods were used in dissemination of materials given to the two experimental groups. It was to establish the extent of participation by elementary personnel, as well as to isolate their attitudes toward the appropriateness of the tested concepts at their educational teaching level.

In searching the literature no previous attempt was found to establish and isolate the attitudes which exist among elementary personnel toward continuing education. It is uncertain if elementary teachers feel an obligation to begin teaching the concept of continuing education to their students, or if administrators have feelings about initiating these concepts.

More specifically, the investigator sought to answer the following questions:

1. Are elementary personnel now participating, or have they participated in continuing education programs in the past three years?
2. Do elementary personnel feel elementary students can assimilate the concepts of continuing education?
3. Can teacher attitudes toward adult and continuing education be determined and isolated?
4. How will two differing approaches compare in changing elementary personnel attitudes?

IMPORTANCE OF THE STUDY

Educational leaders in America have stated emphatically that a great need exists for understanding the concept of continuing education, particularly on the part of young people in the process of completing their formal schooling. Verner (46:14) stated that the opportunity for continuing education is not being utilized:

> Two major goals of adult education are not now being realized; only a minority of the population continue their education into adult life through organized programs; and the ideal of lifelong learning is achieved only for a few.

The concept of continuing education, for the most part, has not been instilled in our teachers before they leave the teacher education program. Teachers must be made aware that changes in education are imperative for our times. Hansen (20:76) made a strong case for educational competence:

> Educational change . . . and the organizing, planning and decision making that goes into change . . . is no longer just a pleasant and discretionary luxury, or something we undertake if we are not busy doing something else. Our changing culture has placed inescapable demands upon our educational system . . . demands that must be met by planned change. An educational system which lags behind the culture is intolerable in a time of rapid social change. Our society cannot afford schools which fail in any preventable measure to provide appropriate learning experiences for all of our citizens of every age and social background, to offer diversified programs to meet individual needs and develop individual potentialities, and to furnish the common experience-background which gives unity and direction to our society.

Many of the professions have long realized that continuing education is an essential phase of life's work. The professional educator must face the challenge other professions have provided by instilling continuing education concepts into the public schools at all levels. Public education can and must prepare its people for lifelong learning before they leave the schools. Teachers, as educational leaders, must be personally involved in education as a lifetime goal as well as an occupation.

The study established the degree of continuing education participation by elementary personnel. It also isolated some of the attitudes that existed among elementary personnel, and attempted to change them where desirable. It was not able to predict definite behavioral changes as a result of attitude change, but some will undoubtedly result. The study could not define or isolate definite attitudinal changes that occurred in elementary students because of a change in teacher attitudes, but the resulting interest in this area should stimulate in-depth studies which will isolate these heretofore untouched areas of human behavior.

PROCEDURE

An adult attitude scale was developed. This instrument was pre-tested with sixty elementary teachers. Appropriate revisions were made. Copies of the scale were then administered to two graduate classes and a group of returning student teachers. The results were examined and deletions made. Experts in statistical methods and test construction were consulted and appropriate revisions were finalized.

The scale was administered to all full-time public elementary school teachers and administrators in Albany and Laramie counties of Wyoming as listed in the 1967-68 State Department records.

The data concerning attitudes, degree of involvement in continuing education programs, and who should be responsible for continuing education were summarized, compared and analyzed. Those scoring low on the attitude scale and those scoring high were divided into an experimental group from each county. Each group received ideas and reasons relative to the support of continuing education programs. The method of presentation was different although the same basic points of concern were stressed. Albany County personnel in addition to the printed materials, were presented a film, lecture, and then asked to discuss the strengths and weaknesses of continuing education as they interpreted it. The Laramie County personnel received only printed materials. They received no opportunity to discuss the materials, to ask questions, or gain feedback and reinforcement for their feelings and opinions. Retests of the attitude scale were then given to determine if a significant change in attitudes had occurred in any group. The "T" test was used to determine the degree of change. A significant difference between the two approaches used was also established.

LIMITATIONS OF THE STUDY

This study was limited to public school elementary teachers and administrators in Laramie and Albany counties of Wyoming. The results of this study were designed to dictate a necessary curriculum for inclusion in elementary teacher training programs. While this may be desirable, and even a necessary research project, the writer considered this study's results a necessary prerequisite to the formation of such a curriculum.

The writer was aware that:

1. Attitudes do not necessarily reflect behavior.

2. Attitudinal change does not necessarily imply behavioral change.

3. Behavioral change, as a result of attitude change, may occur gradually over an extended period of time and may not be indicated by an immediate retest of attitudes following an experiment such as this.

4. It is difficult to know the full extent of behavioral change resulting from this experiment.

5. The attitude scale was not scientifically tested for validity or reliability.

6. In that the attitude scale tested only written responses, it may in effect be testing symptoms rather than attitude changes.

DEFINITION OF TERMS

Adult and/or Continuing Education. This includes all educational activities which adults pursue that are part time. Three elements form this common basis; first, purposeful and orderly education, not just accidental education; second, voluntary, one participates on his own initiative and with his own motivation; and third, it is supplementary to the main responsibility of life.

Elementary Personnel. This includes all elementary public school teachers and administrators in Laramie and Albany counties of Wyoming as shown in the 1967-68 State Department records.

Attitude. A set, a readiness, a predisposition to behave in certain ways toward things in the environment. These things are usually significant social objects like groups of people, behaviors, and institutions.

Attitude-Scale. A specific measuring instrument created for this project which isolated readiness or a predisposition for the concepts of continuing education.

Vocational Education Concepts. Ideas and information about the world of work presented in simplified form for elementary students.

CHAPTER II

REVIEW OF SOME PERTINENT LITERATURE

The role of the public schools in providing continuing education for adults while instilling a love for learning in children which will continue throughout a lifetime is essential. Samuel Brownell, former United States Commissioner of Education suggested at a recent Denver convention that evaluation of a school's effectiveness must include new concepts. His overwhelming concern was that schools encourage opportunities which promote learning by individuals, and encourage a desire to continue learning throughout life.

EDUCATION FOR ALL

The education of all persons to their full capacities throughout life has traditionally been a community responsibility, but is rapidly becoming a national objective. The professors (26:5) first stated what is now realized by many as mandatory:

> There must be a national perception, especially on the part of those who control educational policy, of the essential role of continuing education in preventing human obsolescence and in preserving and further developing the American society. The education of children and youth must be reoriented to a concept of learning as a lifelong process. Teachers in schools and colleges must learn to teach youth so that they leave formal schooling (a) with an insatiable curiosity, (b) with a mastery of the tools of learning, and (c) with a commitment to continue learning through the rest of their life span.

The feeling that education is enjoyable and rewarding was not held by all. The N.O.R.C. study (27:263) found:

> Evidence . . . strongly supports the proposition that the lower classes do not view education in terms of self-realization and do not think of learning as an experience which is rewarding in its own right. The value of education, rather, is perceived strictly in terms of tangible gains, and learning pursuits are not associated with pleasurable life experiences. These underlying dispositions toward education are quite consistent with the vocational concentration of lower-class educational behavior.

These findings support the feelings of leading adult educators (26:13) who state:

> The potential participation in organized programs of adult education is many times the present enrollment. Tapping this potential requires an imaginative and creative approach to the organization and administration of a program for adults. As presently constituted, organized adult education requires considerable experience with formal learning situations and, as a result, it cannot accommodate those with less experience. This holds implications for patterns of organization and methodology if adult education seeks to serve those with little previous formal schooling. The present patterns of adult education suit best those who need it least.

One of the most significant areas requiring the attention of adult educators has been cited. The persons who leave or drop formal education experiences with the least skills are those who have failed to respond to continuing education programs after they leave. N.O.R.C. (27:262) pointed out, "The idea that education is something which one might pursue throughout one's life is probably held less widely by the lower than the middle class." These concepts must be changed to include continuing education for all persons, and the change must begin early in life.

In a chapter titled "The Perception of Education Across the Social Continuum" the N.O.R.C. study (27) illustrated what many adult educators have suspected about the perception of continuing education by various social classes:

1. The lower classes place less emphasis on the importance of high educational attainment, and aspire less often to a college education.

2. The average deprived person is interested in education in terms of how useful and practical it can be to him. There is practically no interest in knowledge for its own sake; quite the contrary, a pragmatic anti-intellectualism prevails.

3. Although education is widely recognized as an appropriate channel for social mobility, the average lower-class person is less ready than the average middle-class person to engage in continuing education even if tangible economic rewards are at stake.

4. The average lower-class person does not perceive education in terms of personal growth or self-realization, and this may explain why the lower classes are much less ready to turn to adult education for recreational purposes than they are for purposes of vocational advancement.

Feelings of Society

A large segment of American society's feelings toward education, as found in the N.O.R.C. study, (27:21-22) must be altered if adult education is to fulfill its imperatives.

> By far the most persistent finding in our investigation was that formal educational attainment plays a highly crucial role in determining whether or not one enters the ranks of adult students. Better educated adults were found not only to be more active in learning pursuits, but also to be more interested in learning per se, more ready to turn to formal instruction to satisfy interests, and much more knowledgeable about the existence of resources for continuing education . . . . Adult education today does not cater primarily to those who are trying to complete an unfinished formal education; only a small fraction of those who take courses do so to receive formal credit for their studies. In this sense, the field cannot be said to play a primarily remedial or rehabilitative role on the American educational scene today. Most people who turn to adult education have at least average, and in many cases above-average educational credentials. Because it is much more than remedial education, adult learning in America today can be better characterized as 'continuing education'--continuing in

the sense of applying systematic learning processes to the particular demands and interests of adult life rather than in the sense of extending a formal education.

Continuing education is quite clearly a middle-and upper-middle-class phenomenon in our society. There are very few continuing learners in our lower classes. Part of this tendency can be explained by the fact that learning and education are perceived and evaluated in radically different ways by persons on different rungs of the social ladder. Lower-class adults not only value high educational attainment less, but they assess the worth of education strictly in terms of the tangible advantages which can be gained from having it. They see little value in obtaining knowledge for its own sake. Our findings of the existence of distinct middle-class and lower-class orientations to education are hardly revolutionary, of course, but they have extremely important implications for adult education today. One consequence of the fact that the lower-class adult does not conceive of education in terms of personal growth or self-realization, for example, is that he is much less ready to turn to continuing education for recreational learning than for vocational learning. Lower-class adults realize fully that education can lead to employment opportunities and job security but education is in no sense defined as pleasurable. Indeed, for the typical lower-class adult, the concepts of 'learning' and 'spare-time enjoyment' convey quite opposite meanings.

Yet at the same time, there is a reasonably strong case for the contention that the lower classes in our society could benefit the most from instruction for use of leisure. What little objective evidence there is indicates that lower-class adults now have as much spare time as persons in higher social positions, but in our study we found that they also have greater difficulty in finding things to do with it and are considerably less enthusiastic about the prospects of having more. The paradox is that the segment of the population which may realize the greatest increment of free time in an age of automation is, on the one hand, the least well-prepared to handle it, and on the other, the least likely to turn to continuing education to develop and expand its spare-time interests. And it is this, perhaps, that constitutes the most critical challenge to the adult educators of the future.

Where Interests Begin

Where do the interests for continuing education throughout life begin? French and Associates (13:95) felt that by the time a student reaches high school he should recognize the importance of continuing to learn. He cited as illustrative behaviors:

(a) Sees learning as a continuous process throughout life.

(b) Views knowledge as exciting and worthy of further educational pursuit.

(c) Enjoys the process of learning and the development of skills, not just the finished product.

(d) Recognizes that learning occurs most effectively in terms of the individual's own effort; therefore, plans for his own growth.

(e) Looks forward to college or other type of post-high school education as a time when he can participate more fully in the culture, thus broadening and deepening his knowledge and insight.

(f) Respects scholarship for what it can do to enrich life.

It is apparent that these attitudes must be strongly entrenched before high school age. The home and early school experiences must foster these concepts in all children, rather than in a select few. N.O.R.C. (27:174) suggested:

> both the parents' and the respondent's education have independent effects on learning dispositions, but the impact of one's own education is approximately twice as powerful as that which stems from having well-educated parents.

Another study by the Adult Education Association (25:13) explained the role of the home and school in concept development early in life:

> The adult personality, we all recognize, has been conditioned by early experiences. The learning patterns of the adult--the ways by which he knows how to learn--reflects the ways in which he learned as a child . . . . Evidence from child-guidance clinics, counseling centers, social work agencies, and psychiatric practice, supports the view that the most important influences on the child's personality stem from his relations to parents . . . next in importance as an influence on the child's personality are probably his early school experiences. The

> public school represents the major deliberate effort of society to influence and develop the rising generations of adults.

These illustrate the significance of early educational experiences and attitudes toward school as a determing factor for those we can expect to find in continuing education programs.

While all learning must not necessarily be formal, the concept that learning is essential to living is most important for all persons. Older age groups feel differently about continuing education than do younger citizens. N.O.R.C. (27:167) found:

> Learning interests decrease rapidly with increasing age and rise just as sharply in the higher educational brackets. In relation to age, it can also be noted that interest not only falls off continuously in each succeeding decade, but that the rate of the decrease appears to be an accelerating one.

These findings point up another significant fact; those who are most in need of outlets for leisure time activities are not always receptive to the opportunities available.

Attitudes and Children

Of all the factors involved in developing a classroom atmosphere conducive to continuing education concepts the teacher likely exerts the greatest influence. Unless one can identify precisely the various types of environments which teachers encourage, and can discover what relationships exist between these environmental patterns and class participation in a love for learning, it seems futile to talk about improving teaching for changing attitudes.

The elementary school perhaps provides the best opportunity for educators to begin the concepts of continuing education early in life. The influence of elementary personnel is tremendous, perhaps more so than we have realized. Smith (42:143) suggested the impact elementary personnel can make on their students:

> The teacher has a great deal of prestige in the eyes of the child, particularly during the elementary-school years. Your attitudes toward family life, religion, government, race, fair play, honesty, hard work, and emotional control serve as models for the child's own attitudes, whether you want them to or not. If you make the best use of your prestige, your influence will be healthful and far-reaching. Your impact will be particularly strong on the child who, because he has failed to find security at home or in his peer group, must seek it elsewhere. Since one way for an insecure child to win security is by revising and redirecting his attitudes, your work with him will give you one of your greatest chances to make a valuable contribution.

This potential for development of attitudes in elementary students requires a high degree of skill on the part of the teacher. She must determine the attitudes that exist as well as the most effective way to instill new attitudes or reinforce those which exist. A number of studies (1, 4, 9, 22, 31, 32) have found that attitudes and ideals in children depend somewhat on age, amount of education, socio-economic status and occupation of parents and also on sex to a lesser degree. These must be considered by elementary personnel, but the more important factor is to assess the intensity of attitudes. (36:126)

> Although the direction of attitudes is reasonably easy to measure, their intensity is much more difficult to appraise. And from an educational standpoint, intensity is far more important than direction.

Weltman and Remmers (48) found a very high relationship (correlation of .80 to .87) between the attitudes of parents and their school age children. It was found that attitudes can be significantly changed if instruction is aimed directly at creating a change with high school students as found by Remmers. (1) The attitudes of young children and adolescence can be changed in varying ways:

> We can see as we study the psychological basis of attitudes that they are energized in large part by the individual's needs for security and the esteem of others. In early childhood, his attitudes conform to those of his parents; in adolescence, he seeks security and esteem in conformity to his peer group. (36:140)

Elementary personnel have two primary tasks as they attempt to work with attitudes: (42:147)

> We have, then, as teachers two primary tasks as we attempt to improve attitudes and standards . . . first, we help the child to broaden his understanding of his beliefs and ideals . . . secondly, we encourage the child to adopt behavior that is consistent with his beliefs and ideals . . . .

> The leader, in other words, is apt to set the tone. Attitudes are caught, not taught. This applies in organizations and classrooms as well as it does in the family. (25:34)

The motives and attitudes of the individual teacher were of significance in this study. Prominent adult educators in the United States and Canada point out that the concept of education as a continuous learning process throughout life must be instilled with the earliest learning experiences of children in the elementary school. For this reason, the attitude of the elementary teacher toward continuing education becomes highly significant. The Commission of the Professors of Adult Education (10:5) stated:

> Now a new note is appearing in American educational thought: adults must continue to learn; learning, like breathing, is a requirement of living. The assumption that learning is a lifelong process is based on a new fact of life: the accelerating pace of social change. For the first time in the history of

> civilization, the time span of drastic cultural change has been telescoped into less than the lifetime of the individual. The current generation of mature adults now represents the first generation faced with managing a culture different in kind than the one originally transmitted to them. The consequence of this new fact of life is such that the well-educated youth of today is an obsolete man tomorrow.

ADULT EDUCATION AT PRESENT

As the economy and society of this country have become more complex, the demand for expert and flawless knowledge and skills has been prodigious. Competition has forced our system to employ more and more only those who are immediately efficient. Thus has come specialization, and the great educational need for it.

Like the economy, education has been unable to find a common denominator, a single fixed curriculum, through which, on the one hand, it can touch and challenge all capacities, or, on the other hand, provide a sound education for satisfying all society's needs. American culture is changing so rapidly that it is no longer possible to educate in one short span of early life for a lifetime of effective living. Progress has gone so far so fast that it is not possible to effectively teach all people any one thing, nor any one person all things. It is possible to teach many people many things if they will continue their education over a sufficiently long period of time, and at times at which they are strongly motivated.

The Commission (10:8) further emphasized the problem of adult education when it stated:

> To its great disadvantage, the curriculum of adult education has no plan. It is largely an a la carte menu comprised of

> miscellaneous items. It is not organized in a way that provides continuity and integration of learning. It is need-meeting but not goal-fulfilling. Finally, it is not connected with youth education by any concept of continuing development throughout the life span.

It seemed essential to determine the attitude of elementary personnel toward continuing education before one could successfully attempt to build upon it, or alter it. There seemed to be no doubt of the desirability for establishing a climate of continuous learning beginning in the elementary schools. In an attempt to determine if public schools and public school teachers were actually participating to an extent that would be feasible, certain questions arose: Should public schools have extensive programs of continuing education? Whom should they serve? Are teachers continuing learners?

Hartke (21:117) found:

> Out of 15,200 school systems studied by the United States Office of Education, only 160 offered any instruction in adult basic education. For the older worker, deprived of the opportunity for education in his youth, the nation, as a whole, simply has no educational assistance.

Recently, the number of public schools participating in the adult education program has risen quite rapidly. In a 1964 survey, the National Education Association found that there were an estimated 12,432 public school systems which had 300 or more students. Of these schools about 54.2 per cent had an adult education program. No breakdown was given as to the number of schools providing basic adult education.

The public schools appear to have a clientele that is somewhat different in its makeup than either the university extension programs or the community of junior colleges. Bruner (5:93) along with several others, found that:

> Public schools serve a significantly larger per cent of those with less than a high school education than do other urban programs. Doubtless one reason for this is the considerable number of younger persons who left school before finishing, but who now find high school graduation a prerequisite for many types of jobs and hence return to finish. An examination of the records of a number of school programs suggests that persons with high school graduation or more, enrolled in public school adult education classes are primarily interested in hobbies, cultural subjects and civic and public affairs forums. As would be expected those using university extension services have an above average amount of education. Only five per cent had not completed high school. Almost two-fifths were candidates for the bachelor's degree. Junior college adult education appears to attract persons of educational and economic status midway between those reached by public schools and university extension.

While some schools have an active adult education program, it is apparent that the number of illiterates, as well as other adult learners, demand a much greater use of public elementary facilities and personnel. Cass (7:8) pointed out:

> There are approximately 10,000,000 adult citizens over twenty-five years of age in the United States today who are functionally illiterate. Nearly 60,000 new functional illiterates reach the age of fourteen each year. The number of adult functional illiterates was reduced only about one million during the past decade in spite of adult education activities. The present high rate of adult illiteracy in one thousand persons there will be found nineteen illiterates, thirty-seven others who have not completed the fifth grade (functional illiterates) and about twenty aliens. Many communities have more illiterates than college graduates.

Challenge to Adult Education

United States Senator Vance Hartke (21:118) pointed out the great challenge for adult education in saying:

> Adult education is a must. Before the necessary upgrading of the technical skills can be effected there must be an

> upgrading of basic educational skills for many. The United States Office of Education now estimates that we have more than twenty-two million adult functional illiterates in this country, men and women without the equivalent of an eighth grade education.
>
> Sixty-two per cent of the jobless fathers of children receiving Aid to Dependent Children have less than an elementary school education.
>
> As the Senate report points out, and this should be emphasized, 'A public education system to which older workers can return to upgrade their skills does not yet exist in the United States.'

Senator Hartke (21:119) further cited the great need for education to begin perpetuating itself when he suggested, "The role of the elementary school and elementary educators seems paramount in inducing a change toward a concept among all students of continuous learning."

Teaching, as well as society, is undergoing rapid changes as new knowledge continues to mushroom. Many school systems and more states require teachers to continue their education in the years they are active teachers. This great need for continuous learning on the part of professional educators hardly needs elaboration, but one man who has made a strong plea for continuing education of teachers is Kidd: (29:303)

> A teacher must be a learner himself. If he has lost his capacity for learning he is not good enough to be in the company of those who have preserved theirs. Dr. D.M. Coaly once put it more bluntly. 'The man who has ceased to learn ought not to be allowed to wander around loose in these dangerous days.'

Why Adults Participate

Verner (46:12) found there were several specific things which determine the amount of further education adults strive for.

He suggested the following:

> The most significant determinant of participation seems to be the amount of earlier formal school experience. Education breeds the desire for more education, therefore, those with more education, rather than less, seek further education in adult life.
>
> Participation in organized adult education programs decreases with age. Most of the programs attract the younger age groups while Cooperative Extension and the packaged programs draw more from the middleaged. None of the existing programs is particularly attractive to the youngest child or the eldest.
>
> Participants in existing programs of adult education are drawn in disproportionate numbers from limited segments of the population. At present, a distinct minority of the adult population is involved and, as a result, adult education is widening the gap between the educated and the educationally underprivileged by encouraging the former to continue learning and thus keep in step with changing conditions, while the latter group is left in a growing state of maladjustment.
>
> The educational needs of large segments of the adult population are not now being served by existing programs. Thus, we find that those with less than eighth grade education; those over fifty-five years of age; those from lower socio-economic levels; and those from certain ethnic and cultural groups are not involved in adult education. It is obvious from the data that present patterns of organization and education opportunities are adopted to those who participate rather than for those who don't.

The number of authors who cited reasons why we must develop the concept of continuous education and provide imaginative new programs of adult education is nearly endless. Yet, in many areas it is not recognized as one of our major concerns in modern education. With the United States population reaching an estimated 228 million by 1975, it becomes readily apparent that overcrowding, congestion, and closer and more frequent interpersonal contacts in both the home and the community will be a result. This requires learning how to live together more effectively. Wilbur Hallenbeck

(19:4) illustrated the point:

> A democratic society depends upon adult education operating in its communities to help people understand democracy, to learn how to make it come to pass, and to become able to fully appreciate its benefits.

An author who perhaps summarized the past role of the public schools and gave an indication of the possible future direction is Robert A. Luke (8:10) of the National Association of Public School Adult Educators.

> One hundred years ago, when the public school adult-education movement was getting underway, the adult-education role of the public schools was primarily thought of as offering opportunities for immigrants from abroad to learn English; or to enable boys and girls, who had to leave school to go to work, to complete their formal education in 'night school.' These concepts of the role of the public school in adult education are still valid, and programs in these areas still represent an important part of the public school's educational responsibility to adults.
>
> In time, however, the public school's adult education program was broadened and the adult curriculum expanded to make available opportunities for employed adults to study a new trade, or to increase their skills in the occupation where they were presently employed.
>
> Along with this development in adult education was the recognition of homemaking as an important vocation, and the public schools began offering educational services designed to help mothers and fathers create a better and more comfortable home for themselves and their children. The pursuit of vocational interests also became an established part of the adult curriculum of the public schools. These programs, too, continue to be an important part of the curriculum of today's public school adult education programs.
>
> Through all of this time, the adult education facilities of the public schools also have carried the principle burden of helping overcome the educational deficits arising from the lack of educational opportunities to many children and young people. Throughout their history the public schools have helped many adults acquire the educational opportunity denied them in their youth.
>
> Today, however, the public schools are beginning to address their curriculum for adults into still another significant area.

> This is the addition to the curriculum of the systematic and self-conscious provision of opportunities for all adults in the community--including those who already possess a full measure of formal education--to have the opportunities to grow in wisdom and to acquire the skills necessary for making decisions as citizens of a democracy. While this has always been an assumed outcome of all adult education, enrichment of the curriculum specifically designed to foster and develop citizenship represented a relatively new emphasis.

CONTINUING EDUCATION IN ELEMENTARY SCHOOLS

These authors have illustrated the vital role that adult education must play in the future. Somewhat less clear is the way in which the public school teachers may introduce continuing education concepts to their students. No doubt remains that these concepts must be introduced early in a child's life in order to be most effective. Lorge (35:5) said:

> By age 10, children have created for themselves a negative picture of aging; graduate students not only have such a view, but even a course on the psychology of aging does little to reduce the negative picture.

In attempting to establish the degree to which elementary personnel actually believe in continuing education, and carry this belief into their classrooms, some uncertainty is experienced. We know society will demand changes in the lifetime occupational goals of students and adults. With this knowledge arises the problem of determining the attitudes of teachers, and then to establish the degree to which they may be changed.

Teacher Training

Teachers, as adult learners, are subject to the same emotional and personal insecurities exhibited by most adult learners. Lewin and Grabble (34:53) found, "People do not change their behavior unless the present situation fails to satisfy their needs. And being under tension, they are ripe for change."

Several authors (14, 25, 43) discussed the problems which must be faced in working with elementary personnel on attitude change. Glaser (14:529) felt:

> Much of training research is designed to find teacher behaviors that will increase the effectiveness with which student behavior undergoes modification . . . . One way is by the selection of new teachers who manifest the desired behavior . . . another is to attempt to modify the behavior directly. The latter is the usual procedure attempted but one suspects that the results tend to be quite unsatisfactory. Behavior is not generally that easily modified. Teachers do not change their ways of behaving simply by being told that learning would proceed with greater efficiency if they behaved differently . . . . Educational research based on the assumption that teachers will change their behavior if they are told how to make their teaching more efficient is very naively undertaken. Rather one must assume that teacher behavior is likely to be the component in the system least amenable to direct change . . . part of the difficulty of modifying teacher behavior stems from the fact that a particular teacher is likely to show a marked tendency to emit certain kinds of verbal behaviors rather than others and changing the behavior of the teacher involves changing verbal habits which are likely to be well established and powerfully reinforced.

The Adult Education Association of the United States (25:23) summarized the many facets of adult behavior to be considered in working with any adult, including elementary personnel:

> Those who teach adults tend to corroborate findings of studies that there are many kinds of learning to which adults are exposed and that the difficulties in teaching adults are of a different kind from those encountered among undergraduates and children. The obstacles to teaching are often intensified by the failure of teachers to adapt techniques to the adult personality. On the other hand, the adult's culturally imposed fears about his own abilities are sometimes too great to be overcome with anything less than the most expert understanding by the teacher. This places a heavy burden upon the adult educator

> who must not only prove to himself that he is confident of the adult's abilities, but must also transmit that confidence to the adult student.

If we can change attitudes to encompass continuing education concepts, is there one method preferable over another with elementary personnel? Welch and Verner (47:231) suggested that the problem of effectiveness in the approach used in disseminating information needs much research:

> The continuous study of the relative effectiveness of a variety of processes in varying situations with differing groups of adults is one of the most pressing needs of adult education. At the moment there is little if any valid scientific basis upon which the practicing adult educator can make wise choices among the variety of processes available. Some progress in this area is being made, but many of the studies fail to draw precise distinctions among the processes studied or to measure effectiveness in a definite way.

Their study went on to show that changes in behavior were brought about best by adult education group methods. These group processes were under the continuous direction of an educational agent, whereas the communication method of sending out materials placed the learning process solely in the hands of the learner. They concluded: (47:236)

> This study examines the relative effectiveness of two discrete processes for the diffusion of knowledge by using changes in behavior expressed through the adoption of recommended practices as an indication or measuring of the degree of learning achieved. It found that the adult educational group method was significantly better than the communication method in changing behavior and that both were significantly better than indirect influences with the particular group studied. Supplementing the educational method by using the communication method did not result in a statistically significant increase in adoption over the educational method alone.

A study, "Behavior Change Following a Persuasive Communication," carried out by Anthony G. Greenwald (16:391) has shed additional light on the problem. Four studies were conducted of which three showed a definite behavior change following a persuasive communication. The fourth showed a pattern of belief change with no behavior change occurring only in subjects who, before the communication, committed themselves to a position opposing it.

A great number of studies have been done in attempts to change attitudes in varying degrees. Some of the earliest work of significance was that of Lewin (33). He attempted to measure the practical outcomes of learning, involving first a change of opinion and then a change in actions. Beals and Bohlen (2) conducted thirty-five studies over a period of twenty years which showed that individuals vary greatly in the readiness with which they will accept new ideas and practices. About 5 per cent of a given population came to a decision quickly, while the more alert members of the general population follow after a measurable time lag. Finally, a small number never shift their position or adopt the idea or practice.

The credibility of the communicator appears to have an influence on learning or the acceptance of the message. Hovland and Weiss (24) found the same content was accepted equally well from three levels of credibility, but that opinions were influenced in the direction advanced when they came from a high credibility source. This effect, however, diminished with time. Greenberg (15:148) suggested that:

> At best, it has been demonstrated that attitudes and information levels are not sufficiently correlated to enable predictions of one from the others. Evidence to this point is largely from surveys where no specific attempt was made to impart new information or to persuade, let alone to do both concurrently.

The problems inherent in working with attitudes were well detailed in the literature. Bruner (5:54) stated:

> It has been indicated that adult educators tend toward overgeneralized usage of the term ' attitudes.' The root of the problem seems to be that adult education attitude research does not go farther than ascertaining their positive or negative dimensions; there are other dimensions which, if known, might serve to highlight the wide variations of attitudes among a population, and might help to explain variations in the effects of educational programs among a group which is generally favorably inclined to the program.

Bruner indicated further that attitude research differs from interest research largely in terms of making a distinction between a cognitive or intellectually perceptive view of an object and the person's affective view of it:

> This distinction is of utmost importance because it puts into researchable terms the basic questions adult educators must ask in evaluating their efforts--what is the relation of one's knowledge about the world around him to his feelings about it, his policy orientation toward it, and ultimately his actions? Does an increase in his knowledge bring about a change in his affective reactions?

In a 1947 study concerning adult attitudes toward Russia, H. Brewster Smith (41) pointed out that attitudes may have various reasons for existence. The frustration for adult educators was that those who held the most stereotyped and least-informed views about Russia also showed a lack of concern. This tendency for persons to remain relatively stable in their feelings unless they find through experience they are thwarted in satisfying a basic human need is strongly stated by Edwards (11:355). He said:

> A person's attitudes are developed only insofar as they help him to satisfy his needs and provide meaning to his environment . . . in other words attitudes arise from both personal needs and cultural stimulation.

Attitudes simplify the psychological life of the individual. They supply him with ready-made frames of reference which he can and does use often unknowingly, to judge "other" objects, events and behaviors. Kerlinger (28:5) pointed out:

> Attitudes, then, perform very important and necessary functions: they give psychological continuity to the individuals social and psychological life, and they furnish him with the ready wherewithal for making responses to complex stimuli.
>
> Attitudes are perhaps major determinants of many perceptions, but particularly of perceptions of complex objects subject to ambiguous interpretation . . . the clearer the objects of perception, the less will attitudes affect such judgments. Attitudes should affect the educator's judgments more than the physician's judgments, since the criteria of a good physician are more concrete and specific than the criteria of a good teacher.

Newcomb, (37) in discussing how attitudes endure, believes that when a person perceives an influence as a force opposed to his ego-involvement, he is likely to counter with other forces toward defense of his own self. Almost instantaneously, the individual tends to intensify his own attitude in spite of influences that seek to change it. Arguments seem to be ineffective as they actually arouse a person's defense motives. In other words, people are apt to maintain their attitudes for one or two reasons: either they have met no new influences because they have selected the nature of their perceptions, or they are able to counter pressures which are opposed to their views with various face-saving defenses, usually based on the social support of some group.

Attitude Change

Despite the inherent tendency of attitudes to preserve themselves, they can be modified. Houle, (23) in his account of the Armed Services' educational program, presented research evidence which showed that adult attitudes can be changed. Others, such as Tuckman and Lorge (44) and Edwards (11) pointed out that the nature and degree of ego-involvement in the material is significant. They suggested that the most favorable time for modifying attitudes was during periods of emotional tension or strife. Hall (18:129) said, "A considerable degree of emotional stir-up may be necessary to unfreeze the present and refreeze at the new level . . . change has a better chance of succeeding if the step-up is great rather than small." He described the three levels which accomplish this change as: (1) unfreeze the present level, (2) move up to the new level, and (3) freeze at the new level. Eichholz (12) suggested many other factors which often play a less important part than might be suspected. His study dealt with why teachers reject new approaches. It was found that such factors as the number of years of teaching experience or the grade taught made no appreciable difference. The important factors seemed to be based on the subject's inner state of being rather than on any one method, technique or device.

The most successful approach to use in changing attitudes has been discussed in length both inside and outside of adult education circles. Birnbaum, (3) in his article, "Mind and Emotion in Adult Education" debated whether "emotional" or "rational" appeals were more effective in changing attitudes. Remmers (39) found that factual approaches designed to change attitudes were only successful when the facts were presented in a one-sided approach and there was a definite attempt to produce emotional entanglements related to the facts. Other research has shown that among people initially favorable to the suggested attitude, presenting one side was more effective; among those initially opposed the presentation of both sides with positive conclusions was more effective. An important factor in this research showed that the better-educated changed their opinions more when only one side was given.

Although attitudes are often suggested by various "models" of one sort or another, the proposed attitude pattern must fit into the personality of the individual adopting the attitude. The attitudes suggested usually will not persist unless confirmed by experience. One type of experience which has a positive effect on attitudes is developed in a group context. Guilford (17:254) has written:

> Since attitudes are developed in a social context, it is much easier to change the attitudes of individuals formed into groups of their choosing, than it is to change the attitudes of people without group affiliation.

The selected material presented here represents part of the literature on attitudes, attitudinal change, and the most conducive methods to elicit change. The evidence indicated that

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desirable changes in adult behavior must result from personal meaning to the adult learner. Perhaps the best summary is put forth by Verner (45:25):

> Desirable changes . . . are accomplished when the processes employed for organized systematic learning are effective in transmitting the necessary knowledge in a manner appropriate to the organizational and cultural patterns of the adult participants through procedures appropriate to the content, the learning situation, and the individual participant.
>
> When the methods employed to introduce proposed changes accomplish learning systematically and when a variety of techniques are utilized to facilitate the acquisition of knowledge from which systematic learning results, then the alterations in behavior that occur will have a greater degree of permanency.

CHAPTER III

INSTRUMENTATION AND ANALYSIS

The purposes of this chapter were threefold: to explain the procedure used in gathering the initial data on attitudes; to summarize highlights from the initial data; and to analyze individual and group characteristics relative to specific data areas.

Initial Procedure

A total of 455 elementary personnel in Laramie and Albany counties were listed as full-time elementary teachers or administrators in the 1967-68 Wyoming State Department of Education records.

From these records the following information was gathered; the age of the subjects, the number of years of teaching experience or administration, the number of hours held beyond the bachelor's degree, and the institution of higher education from which each graduated.

Each of these persons was mailed an adult-attitude scale which had been specifically devised for this project. This scale was designed to measure elementary personnel attitudes toward specific areas of concern about adult and continuing education, the learning process, motivation and readiness, awareness of changes in society and the need for support of continuing education to stay abreast of these changes. No other suitable scale could be located, and those scales which did exist were designed primarily for fields such as guidance and counseling and personnel administration.

While certain items from existing scales may have been usable, it seemed desirable to develop a scale designed specifically to measure the attitudes of elementary school personnel toward continuing education concepts in this project.

The initial design was developed by the writer and experts in adult education at the University of Wyoming. This scale was then administered to sixty elementary teachers in the Midwest. The results of this sampling pointed out the strengths of the scale, as well as the need for revision of numerous items. Appropriate revisions were made after consulting with adult education leaders in Wyoming and Colorado in attitude-scale construction, statistical procedures, and item construction. It was then administered to forty returning Wyoming student teachers and a class of thirty graduate students for criticism of construction, design and appropriateness. Revisions were again made after consulting the chairman of the statistics department concerning any further statistical procedures which might add stature to the scale or to its administration. The scale was then used with a class of adult education graduate students who were requested to critically examine all phases of the instrument with particular attention to clarity, purpose, basic premises and design. After these suggestions had been discussed by experts in adult education, vocational education, statistical methods, item construction, and administration, twenty-six specific items were selected for inclusion in the final attitude scale. This selection was based on three previous administrations, revisions, and the advice of numerous authorities in the field.

The directions for answering the scale, found in Appendix A, page 78 , as well as the seven-item scale used, were developed using Osgood's (38) book as a guide.

Over 75 per cent of the attitude scales were returned, and a final sample of 298 persons was selected. All of the information presented in this chapter was based on the answers provided by the 298 respondents. In some cases several individuals chose not to answer every item. This fact accounts for the varying number of total responses reflected in the tables.

Ten days after the initial attitude-scale had been received by the respondents, a follow-up letter was sent requesting the immediate return of the scale. When this did not bring the desired results, each individual received a personal telephone call from the writer requesting his cooperation. Many persons offered apologies for the delay, and volunteered to forward the scale immediately. Others stated a dislike for the time required to complete the scale, and asked to be excused because of their professional work load. Some stated they simply were not interested in participating. The final tabulation was slightly better than 77 per cent from Albany County and 63 per cent from Laramie County.

In the initial four items on page one of the scale dealing with personal involvement in continuing education programs, the respondents were asked to indicate their feelings about where the responsibility rested for continuing education programs. They were asked to respond to three things; had they completed a continuing education course in the past three years; were the courses completed taken for credit, non-credit or combinations; and, was the main reason for participation in continuing education to advance on the salary schedule, complete a degree, satisfy a personal need, strengthen their profession in teaching, or satisfy a professional requirement.

The fourth section of page one asked for opinions of where the responsibility rested for providing programs of continuing education: public schools, junior or community colleges, colleges and universities, business and industry, or other areas.

The final part of the instrument, the attitude scale, was composed of 26 items. One total score representing the sum of all 26 items was established for each respondent. In addition, four major sub-groups were established to aid in a further breakdown of each respondent's answers.

Sub-group one included items dealing with concepts of adult and continuing education. The items included in this sub-group were numbers 1, 5, 10, 11, 14, 21 and 24. Sub-group two included items concerned with the learning processes of children and adults. The items included in sub-group two were numbers 4, 6, 9, 13, 15, 19 and 23. Sub-group three included the respondents attitude toward how best to motivate and prepare children for the concepts of continuing and vocational education. The items included in sub-group three were numbers 2, 3, 7, 12, 16, 17 and 20. Sub-group four included items about the changes which were occurring in society and the need for support of continuing education programs to deal with these changes. Items included in sub-group four were numbers 8, 18, 22, 25 and 26.

Highlights from Initial Data

The typical respondent was 43 years old, had 13 years of experience, and had completed 17.5 hours beyond the bachelor's degree. These persons had completed continuing education courses in the past three years.

While any individual could score as low as one or as high as nine points on any item, the average respondent scored 6.54 points on each item in the scale. Since nine indicates a strongly positive attitude toward the concepts tested in the scale and one a strongly negative attitude, the 6.54 average response by all persons on all items indicated the average elementary person felt rather positively about the concepts tested in this scale.

Two hundred and forty-two persons (81 per cent) completed continuing education courses in the previous three years, 1965 to 1967. These persons scored an average of 171.5 total points on the scale, where 234 maximum points were possible. Fifty-six persons (19 per cent) had not completed any courses, and their average of total points on the scale was 163.6. This difference of eight points was shown to be significant at the .05 level.

The respondents participated in continuing education courses mainly for credit. Of the total, 188 (78 per cent) indicated credit courses had been their choice; 40 persons (16 per cent) said they had taken courses for a combination of reasons, both credit and non-credit; and 14 (6 per cent) indicated they had taken only a non-credit course in the past three years.

Twice as many teachers took continuing education courses to satisfy a professional requirement as they did for any other reasons. Ninety-four respondents (40 per cent) indicated they had taken courses to keep a professional certificate in force or for other professional reasons. Half as many, 47 (20 per cent) said they had taken courses to strengthen their teaching. Forty-four (18 per cent) had participated to complete a degree, while 43 (17 per cent) wanted to satisfy a personal need. Fourteen respondents (6 per cent) said they were interested in continuing education courses only to advance on the salary schedule.

Responsibility for Continuing Education. A majority of the respondents, 161 (67 per cent) felt that the responsibility for continuing education programs should rest with colleges and universities. Only 54 respondents (22 per cent) said the public schools should play a role in this endeavor. Twelve (5 per cent) said the junior or community colleges should play some role in these programs, 7 (3 per cent) said it should be business and industry, and 8 people (3 per cent) stated that other agencies such as churches, community organizations, and YMCA's/YWCA's should be responsible.

It was interesting to note that total scores for Wyoming versus non-Wyoming graduates were almost exactly the same. The total average score for the 174 Wyoming graduates was 169.983 while the 124 non-Wyoming graduates scored 169.992. No significant difference existed in the feeling shown by these two groups of teachers.

Sub-Group Scores. In comparing the four areas represented by sub-groups, sub-group one dealing with concepts of adult and continuing education had the lowest average scores by all respondents. An average score of 5.8 indicated many respondents were rather uncertain about the value of the concepts as represented in this scale.

Sub-group four, concerning changes in society and support of continuing education was only slightly higher with an average score of 6.5 by all respondents in this area.

Sub-group three, concerning readiness and motivation for vocational and continuing education concepts was somewhat higher with an average score of 6.8 by all respondents.

Sub-group two, dealing with the learning processes received the highest average scores (6.9) by all respondents. While this score represents a positive stand by the respondents, it clearly indicated a great deal of work is yet to be done with elementary personnel attitudes before they begin to approach a highly positive position as measured by this instrument.

Age, Experience and Hours

Three basic categories were established on which to base comparisons. These were age, experience and hours completed beyond the bachelor's degree. A further breakdown of each category is illustrated in Table I.

The greatest number of teachers (117) were over 51 years of age, with the remainder (180) closely divided between the age

TABLE I

AGE, EXPERIENCE AND GRADUATE HOURS COMPLETED

Category	Number of Respondents	Per Cent
Age in Years		
20 to 35	94	31.6
36 to 50	86	28.9
51 & over	117	39.5
Years of Teaching Experience		
0 to 10	148	49.7
11 to 20	82	28.6
21 to 30	36	12.1
31 & over	32	9.6
Graduate Hours Beyond the Bachelor's Degree		
0 to 15	173	58.1
16 to 30	64	21.5
31 to 45	33	11.1
46 & over	28	9.3

groups 20 to 35 (94) and 36 to 50 (86). Nearly one-half of the elementary personnel had ten years or less of teaching experience, 30 per cent had 11 to 20 years and only 20 per cent had 21 or more years teaching experience. Well over one-half of all teachers had 15 hours or less beyond the bachelor's degree. Approximately 20 per cent (61 persons) had 31 or more hours, which would be a master's degree if 30 hours were considered a minimum.

Table II illustrates the difference which existed in total scores for the various age categories. Respondents who were 35 years of age or less totaled 23.4 per cent and had total scores above 186 points. Persons 36 to 50 or 20.9 per cent scored at the same level, and 13.7 per cent of the older teachers (51 and over) reached this level in total score.

The more experience a teacher had, the less likely the person was to value the concepts tested by this scale. The youngest teachers with teaching experience of 20 years or less consistently scored higher in the two highest categories than did their older counterparts with 21 years or more experience in the classroom, as shown in Table III.

Although 46 hours beyond the bachelor's degree was the category with the fewest numbers in it, these respondents scored higher than did those with less education. Table IV shows the manner in which additional graduate hours affect total scores. Persons with 31 hours or more consistently recorded the highest total scores. Judging from these responses, graduate hours do affect total scores as measured by this attitude scale.

TABLE II

RANGE OF TOTAL SCORES AND PERCENTAGE ACCORDING TO AGE

Category	Range of Total Scores - Number of Persons and Per Cent											
Age in Years	106 - 125		126 - 145		146 - 165		166 - 185		186 - 205		206 - 225	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
20 to 35	3	3.2	2	2.1	28	29.8	39	41.5	21	22.3	1	1.1
36 to 50	1	1.2	9	10.5	24	27.9	34	39.5	16	18.6	2	2.3
51 and over	4	3.4	10	8.5	30	25.6	57	48.7	16	13.7	0	

TABLE III

RANGE OF TOTAL SCORES AND PERCENTAGE ACCORDING TO EXPERIENCE

Category	Range of Total Scores - Number of Persons and Per Cent											
ears of Teaching Experience	106 - 125 No.	%	126 - 145 No.	%	146 - 165 No.	%	166 - 185 No.	%	186 - 205 No.	%	206 - 225 No.	%
0 to 10	4	2.7	6	4.1	43	29.1	63	42.6	29	19.6	3	2.0
11 to 20	1	1.2	9	11.0	17	20.7	37	45.1	18	22.0	0	
21 to 30	1	2.8	4	11.1	11	30.6	17	47.2	3	8.3	0	
31 & over	2	6.3	2	6.3	11	34.4	13	40.6	4	12.5	0	

TABLE IV

RANGE OF TOTAL SCORES AND PERCENTAGE ACCORDING TO GRADUATE HOURS COMPLETED

Category	Range of Total Scores - Number of Persons and Per Cent											
Graduate Hours Obtained Beyond the Bachelor's Degree	106 - 125 No.	%	126 - 145 No.	%	146 - 165 No.	%	166 - 185 No.	%	186 - 205 No.	%	206 - 225 No.	%
0 to 15	5	2.9	9	5.2	51	29.5	75	43.4	32	18.5	1	0.6
16 to 30	2	3.1	9	14.1	16	25.0	28	43.8	9	14.1	0	
31 to 45	1	3.0	2	6.1	7	21.2	15	45.7	7	21.2	1	3.0
46 & over	0		1	3.6	8	28.6	12	42.9	6	21.4	1	3.6

Table V is somewhat different than the remaining tables due to a different range of responses for this sub-group dealing with changes in society and our need for support of continuing education programs to keep up with these changes. Respondents 51 years of age and over felt less inclined to support continuing education and were generally less aware of changes in society than those persons who were younger. The two younger age groups are almost equally divided in their responses for the two highest response categories.

The amount of experience a respondent had in the public schools was negatively related to the highest scores for sub-group four. The two groups having 20 years or less experience scored from 3.9 to 20.7 per cent above their older counterparts in the two top range of scores. The two groups with the least teaching experience had 37.7 per cent of their responses in the two highest score areas while the most experienced groups had 25.4 per cent.

The number of hours held beyond the bachelor's degree also related to high scores. Persons with 31 hours or beyond had 48.9 per cent of their answers in the two highest score areas, while those with 30 or less hours had only 29.7 per cent in the two top score ranges. These comparisons can be found in Table V.

Table VI illustrates the effect age has on sub-groups one, two and three. All age levels scored lower on sub-group one, adult and continuing education, than on either of the other two areas. The concepts of adult and continuing education appear to

TABLE V

COMPARISON OF SUB-GROUP FOUR SCORES* WITH AGE, EXPERIENCE AND HOURS COMPLETED

Categories	Range of Scores - Number of Persons and Per Cent													
	12 - 16		17 - 21		22 - 26		27 - 31		32 - 36		37 - 41		42 - 45	
Age in Years	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
20 to 35	0		5	5.3	12	12.8	25	26.5	18	19.1	22	23.4	12	12.8
36 to 50	0		6	6.9	8	9.3	21	24.4	20	23.3	19	22.1	12	14.0
51 & over	2	1.7	14	11.9	8	6.8	40	34.2	17	14.5	25	21.4	11	9.4
Years of Teaching Experience														
0 to 10	0		6	4.1	15	10.1	44	29.7	31	20.9	34	23.0	18	12.2
11 to 20	1	1.2	6	7.3	6	7.3	21	25.6	15	18.3	21	25.6	12	14.6
21 to 30	0		8	22.2	4	11.1	11	30.6	6	16.7	5	13.9	2	5.6
31 & over	1	3.1	5	15.6	3	9.4	10	31.3	3	9.4	7	21.9	3	9.4

TABLE V (continued)

Categories	Range of Scores - Number of Persons and Per Cent													
	12 - 16		17 - 21		22 - 26		27 - 31		32 - 36		37 - 41		42 - 45	
Graduate Hours Obtained Beyond the Bachelor's Degree	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0 to 15	2	1.2	10	5.8	15	8.7	51	29.5	41	23.7	39	22.5	15	8.7
16 to 30	0		11	17.2	7	10.9	22	34.4	6	9.4	9	14.1	9	14.1
31 to 45	0		2	6.1	3	9.1	8	24.2	3	9.1	10	30.3	7	21.2
46 & over	0		2	7.1	3	10.7	5	17.9	5	17.9	9	32.1	4	14.3

* Sub-group four is concerned with the changes which are occurring in society and the need for support of continuing education programs to deal with these changes.

TABLE VI

COMPARISONS OF SUB-GROUPS ONE, TWO AND THREE* ACCORDING TO AGE

Category	Sub Group	Range of Scores - Number of Persons and Per Cent													
		15 - 22		23 - 30		31 - 38		39 - 46		47 - 54		55 - 62		63	
Age in Years		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
20 to 35	1	2	2.1	15	16.0	24	25.5	35	37.2	15	16.0	3	3.2	0	
	2	0		0		4	4.3	20	21.3	48	51.1	20	21.3	2	2.1
	3	0		2	2.1	6	6.4	17	18.1	41	43.6	27	28.7	1	1.1
36 to 50	1	3	3.5	7	8.1	28	32.6	25	29.1	18	20.9	5	5.8	0	
	2	0		0		3	3.5	25	29.1	42	48.8	15	17.4	1	1.2
	3	0		0		10	11.6	27	31.4	29	33.7	17	19.8	3	3.5
51 & over	1	2	1.7	9	7.7	27	23.1	34	29.1	38	32.5	7	6.0	0	
	2	1	.9	2	1.7	8	6.8	37	31.6	48	41.0	20	17.1	1	.9
	3	0		5	4.3	14	12.0	27	23.1	45	38.5	22	18.8	4	3.4

---

* Sub-group one deals with concepts of adult and continuing education. Sub-group two concerns the learning processes. Sub-group three includes attitudes about motivation and readiness of children for vocational and continuing education concepts.

be lacking in all age groups to a greater degree than do the concepts of sub-groups two and three. Area three, attitudes about motivation and readiness, had the largest percentage of respondents in the top range of scores. Less difference in percentage can be noted between sub-groups two and three than between sub-group one and either of the other two sub-groups.

The number of years of experience showed less effect on sub-group one than it did on two and three. Adult and continuing education concepts were least affected by experience, but experience did play a more significant part in the responses to the learning process and motivation and readiness for continuing and vocational education concepts. Teachers felt more strongly that they understood the learning process and were ready to consider vocational and continuing education concepts in their elementary schools than they did about adult and continuing education concepts as shown in Table VII.

The number of hours held by elementary personnel beyond the bachelor's degree had less effect on their attitude toward sub-group one than it did toward either of the other areas. Those persons with 46 hours and over appeared to favor most strongly the areas of learning and also readiness for continuing and vocational education concepts in the elementary schools. They were less familiar with the concepts tested in sub-group one--adult and continuing education. Table VIII shows the difference evident between sub-group one and sub-groups two and three for the various graduate hours completed by respondents.

TABLE VII

COMPARISONS OF SUB-GROUPS ONE, TWO AND THREE* ACCORDING TO EXPERIENCE

Category	Sub Group	Range of Scores - Number of Persons and Per Cent													
Years of Teaching Experience		15 - 22 No.	%	23 - 30 No.	%	31 - 38 No.	%	39 - 46 No.	%	47 - 54 No.	%	55 - 62 No.	%	63 No.	%
0 to 10	1	3	2.0	16	10.8	44	29.7	48	32.4	32	21.6	5	3.4	0	
	2	0		0		5	3.4	43	29.1	68	45.9	29	19.6	3	2.0
	3	0		2	1.4	11	7.4	34	23.0	59	39.9	40	27.0	2	1.4
11 to 20	1	2	2.4	9	11.0	17	20.7	32	39.0	17	20.7	5	6.1	0	
	2	0		1	1.2	4	4.9	20	24.4	41	50.0	15	18.3	1	1.2
	3	0		3	3.7	10	12.2	16	19.5	37	45.1	14	17.1	2	2.4
21 to 30	1	1	2.8	5	13.9	8	22.2	8	22.2	12	33.3	2	5.6	0	
	2	0		1	2.8	2	5.6	12	33.3	17	47.2	4	11.1	0	
	3	0		0		5	13.9	8	22.2	13	36.1	8	22.2	2	5.6
31 & over	1	1	3.1	1	3.1	10	31.3	7	21.9	10	31.3	3	9.4	0	
	2	1	3.1	0		4	12.5	7	21.9	12	37.5	8	25.0	0	
	3	0		2	6.3	4	12.5	13	40.6	6	18.8	5	15.6	2	6.3

* Sub-group one deals with concepts of adult and continuing education. Sub-group two concerns the learning processes. Sub-group three includes attitudes about motivation and readiness of children for vocational and continuing education concepts.

TABLE VIII

COMPARISONS OF SUB-GROUPS ONE, TWO AND THREE* ACCORDING TO GRADUATE HOURS COMPLETED

Category	Sub Group	Range of Scores - Number of Persons and Per Cent													
Graduate Hours Obtained Beyond Bachelor's Degree		15 - 22		23 - 30		31 - 38		39 - 46		47 - 54		55 - 62		63	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0 to 15	1	3	1.7	23	13.3	50	28.9	55	31.8	37	21.4	5	2.9	0	
	2	0		1	.6	9	5.2	46	26.6	86	49.7	30	17.3	1	.6
	3	0		3	1.7	16	9.3	33	19.1	76	43.9	42	24.3	3	1.7
16 to 30	1	1	1.6	3	4.7	20	31.3	14	21.9	20	31.3	6	9.4	0	
	2	1	1.6	1	1.6	4	6.3	23	35.9	24	37.5	10	15.6	1	1.6
	3	0		3	4.7	10	15.6	18	28.1	22	34.4	9	14.1	2	3.1
31 to 45	1	0		4	12.1	5	15.2	12	36.4	9	27.3	3	9.1	0	
	2	0		0		2	6.1	6	18.2	17	51.5	7	21.2	1	3.0
	3	0		1	3.0	2	6.1	12	36.4	11	33.3	6	18.2	1	3.0
46 & over	1	3	10.7	1	3.6	4	14.3	14	50.0	5	17.9	1	3.6	0	
	2	0		0		0		7	25.0	11	39.3	9	32.1	1	3.6
	3	0		0		2	7.1	8	28.6	6	21.4	10	35.7	2	7.1

* Sub-group one deals with concepts of adult and continuing education. Sub-group two concerns the learning processes. Sub-group three includes attitudes about motivation and readiness of children for vocational and continuing education concepts.

CHAPTER IV

PROCEDURE AND RESULTS OF THE EXPERIMENTAL DESIGN

This chapter was designed to describe the procedure used to select participants for inclusion in the experimental follow-up study of attitudinal change; the two differing approaches used in attempting to change adult attitudes; and the results of the experiments in changing adult attitudes.

Selection of Experiment Participants

The preceding chapter explained the procedure followed in the initial stages of the experimental design; that of working with 298 public school elementary personnel to establish the attitudes which existed toward the concepts tested in this adult attitude scale. After these returns were tabulated, mean scores and standard deviations were determined through statistical analysis by computer. This procedure established a complete range of scores for all respondents, which were then further broken down into responses from persons in Laramie and Albany counties.

To select respondents which might receive the most benefit from the experimental study, it was decided to include those who scored outside the limits of one standard deviation (19.0) below the mean score (169.9). Through this procedure it was determined that eight persons in Albany County and 42 in Laramie County had scores at the extreme lower limits of the attitude scale.

Further consideration was then given to the benefits which would result from also working with the top scoring group of respondents whose scores were one standard deviation (19.0) above the mean (169.9). By including these persons, several additional comparisons were feasible concerning low- and high-scoring responses; can adult attitudes be changed significantly with low-scoring and/or with high-scoring respondents? Was there a significant difference between the growth shown by low respondents and that shown by high respondents? Was there a significant difference between the experimental approaches used with the low groups, or with the high-scoring groups? Did either experimental method appear to be significantly superior to the other in the overall growth shown by total groups from either county?

After consultation with authorities in adult education and statistics, it was determined that the inclusion of both groups would bring the greatest degree of flexibility and significance to the study. For this reason both groups were included.

With the addition of the top respondents, 15 persons were added in Albany County making a total of 23 to be included in the experiment. Thirty-three additional Laramie County personnel were identified making a total of 75 to be contacted for the experiment.

The Albany County persons were called by telephone asking them to participate in the follow-up study. It was explained that they would be requested to attend two after-school sessions of approximately one and one-half hours each to view the film, "To Touch A Child," hear a lecture by an authority in the field of adult education, and hold discussions in a small group situation. Out of this group of 23 persons, 18 (79 per cent) indicated they would participate. From this group 12 (67 per cent) actually came to the sessions and completed the experiment. These twelve included five persons in the lower-scoring range, and seven in the high range.

Laramie County personnel were asked to participate in the follow-up study with a personal letter and post card (Appendix B, page 85) which they were asked to return indicating their willingness or unwillingness to participate in this project. Out of 75 persons asked, 53 (70 per cent) indicated they were willing to do so. Twenty-nine (54 per cent) actually did follow the directions and completed the experiment satisfactorily so that the comparisons could be made. The 29 included 18 in the lower-scoring range and eleven in the high.

Design of the Experiment

Two sessions were conducted by the writer with the twelve Albany County elementary personnel. Both sessions were held at Thayer School in Laramie, Wyoming, with the consent of the school's principal and the Laramie, Wyoming superintendent of schools.

Session one included a combination lecture and small group discussion conducted by Dr. Glenn S. Jensen, Chairman, Department of Adult Education and Instructional Services for the College of Education at the University of Wyoming. Dr. Jensen's lecture, and the group discussion, centered on the same basic materials which were mailed to the Laramie County personnel (Appendix B, page 85) for study. During this informal session, participants were encouraged to ask questions and clarify any areas that were unclear in their thinking concerning the lecture, the attitude scale, or any concepts related to it. This they apparently did, judging from the outward enthusiasm shown.

Session two was conducted by the writer, using small group discussion after the group had viewed the film "To Touch A Child." Judging again from outward appearances, the group members were deeply concerned about the questions raised in the film, as well as by other members of the group. This session dealt with the further concerns which they expressed and which were outlined in the written materials they received in the first session. These written materials were exactly the same as those sent to all Laramie County participants. This group disbanded after completing the adult attitude scale and returning it to the writer.

The Laramie County personnel that participated in the follow-up experiment were not involved in any structured small group discussions, nor did they see the film "To Touch A Child" used in the Albany County experiment. Every attempt was made to provide the same basic materials to both Laramie and Albany county groups, and the time spent in the experiment was approximated as closely as possible. Materials were gathered by the writer from authors and authorities in the field dealing with the four basic areas of interest tested in sub-groups one through four on the attitude scale. Also sent to the Laramie County participants was a written copy of the film, "To Touch A Child." These materials were printed and sent at approximately ten-day intervals. Included with the final send-out of materials was another copy of the attitude scale to be returned for scoring and inclusion in the results of the experiment.

Results of the Experiment

Upon the return of all adult attitude scales, the writer again consulted with members of the department of statistics in the College of Commerce and Industry to determine the appropriate statistical methods to be followed in analyzing the experimental data. Two basic comparisons were decided upon, one using the "double-tailed T test" and the other the "T test."

The computer cards used in the initial run of data on all 298 respondents were sorted to locate the respondents participating in the follow-up studies in both counties. Second cards were then punched for each participant listing final responses to the adult attitude scale. Responses were then computed from both card one, representing the initial data, and card two, representing the changes which occurred during the experiment. The same computer program was used for these responses as had been run on the initial 298 respondents. Valid and reliable comparisons were in this way expected.

To these comparisons, the previously mentioned tests were applied. The statistical comparisons made were based on the following formulas: (the alpha level was used for all comparisons)

> To compare sub-groups or total scores using the results of two analysis on each individual, a "paired-T test" was administered. The formula used was:

$$t_{n-1} = \frac{\bar{d}}{Sd/\sqrt{n}}$$

When d = mean of the differences

When n = number of observations

To compare changes between groups, a "T test" was administered. The formula used was:

$$t_{n-r} = \frac{\hat{L} - L_o}{\sqrt{MS_w}\ \sqrt{\sum_{j=1}^{r} \left(\frac{C^2 j}{Nj}\right)}}$$

Where $L = \hat{L} = C_1\bar{X}\cdot_1 + C_2\bar{X}\cdot_2 + \cdots + C_r\bar{X}\cdot_r$

C_j's are constants

MS_w = Mean Squares Within from Analysis of Variance

To determine the degree of significance, the .05 level of confidence was established as satisfactory by the writer in consultation with statisticians. This level of significance was used throughout the project, and was assumed in the following statements.

Changes Within Sub-Groups

All groups averaged higher scores on the sub-group totals and the total score as tested by the attitude scale after completing the experimental study. Table IX illustrates the changes made by each experimental group for the sub-groups tested by the attitude scale as well as the total change in score.

Each group improved in its awareness of the concepts tested to a significant degree on total scores. Both methods for the dissemination of materials were significantly effective in working with low and high groups when total scores were considered. Both

TABLE IX

NUMBER AND SIGNIFICANCE OF CHANGES* BY SUB-GROUP AND TOTAL SCORES

Category	Attitude Scale Sub-Group Number								Attitude Scale Total Score	
	1		2		3		4			
	No.	Signif.	No.	Signif.	No.	Signif.	No.	Signif.	No.	Signif.
Laramie County (Low)	8	Yes	10	Yes	6	No	13	Yes	42	Yes
Albany County (Low)	5	No	6	Yes	15	Yes	14	Yes	40	Yes
Laramie County (High)	2	No	1	No	3	No	2	No	8	Yes
Albany County (High)	2	No	2	No	3	No	2	No	11	Yes

* Numbers indicate the average total points gained by each group. Yes or No indicates whether change in total points was significant at the .05 level of confidence.

methods were also effective when working with the lowest-scoring groups of respondents with two exceptions: the small group instruction method was not effective in changing attitudes toward adult and continuing education (sub-group 1) with the Albany County participants to a significant degree; and the materials sent out with no personal contact were not effective enough to significantly change attitudes with the Laramie County personnel in the area of motivation and readiness (sub-group 3). The other total of six sub-groups were changed significantly using both experimental methods.

A very different situation tended to exist in the findings for the high group of participants in the experimental study. While there was a significant change in total scores for both high groups using both experimental methods, no significant changes were made in any sub-groups using either method. Changes did occur which resulted in higher numerical scores for all sub-groups of the high respondents, but they were at a non-significant level. From this experiment, and the conclusions which can be drawn from it, the lower-scoring respondents gained the greatest amount in the sub-groups using both experimental methods. While all the groups gained significantly in total scores, neither method proved to be significantly effective in changing sub-group score for the high-scoring respondents.

Changes Between Sub-Groups

While positive changes did occur in the total number of points scored in all sub-groups and in all total scores, no significant differences were evident between any of the sub-group or total scores when comparing respondents with low scores in Laramie and Albany counties or when comparing those with high scores in Laramie and Albany counties. The differences in the experimental approach used affected total scores. The low-scoring group in Laramie County exceeded the total average scores of the low-scoring group in Albany County by two points. This was not a significant difference. The high Albany County participants, however, exceeded the high Laramie County persons in total average scores by three points. This too was not a difference of significance.

One additional comparison was made using these data. That was a comparison of the total low scores for both counties compared to the total high scores to find if a significant degree of difference had occurred. A "T test" indicated that the differences found between these groups was not significant at the .05 level.

While no tests were administered to determine the additional total number of points which might have been accumulated by "practice" or from the "Hawthorne Effect" by simply retaking the same test, the assumption was made that the degree of change would have been minor and insignificant.

Changes Between Experimental Methods

Perhaps the most important consideration to be gained from this experiment concerned the method which was most effective in bringing about total change in responses, considering all sub-groups as well as total scores. To obtain this comparison, the total change showed by all Laramie County personnel in all subgroups as well as in total scores was compared to that same change shown by all Albany County personnel through an analysis of variance to which a "T test" was applied.

The results of this analysis indicated that both experimental approaches used were significantly effective in bringing about desired changes in adult attitudes. While it was not possible to know the amount of time spent by Laramie County participants in reading, studying and assimilating the materials sent to them by mail, it was assumed that a total time of three hours was a reasonable expectation. For this reason the Albany County groups were also limited to approximately three hours of lecture and discussion. The results of the experimental comparison indicated that although individual changes were significant, they were not equal. The changes which occurred through the small group discussion method used in Albany County were enough greater that they were considered significant at the .05 level. The change in total scores would not have occurred by chance when compared to the Laramie County experimental procedure.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

SUMMARY

The Problem

The major purposes of the present project were two-fold. They were (1) to determine the attitudes which elementary public school teachers and administrators held toward education as a continuing and lifelong process, and (2) to determine if adult attitudes could be isolated, tested, and changed to encompass new concepts using two differing experimental approaches.

Importance of the Problem

Educational leaders have stated repeatedly the need for understanding the concepts of continuing education by young people. Public education must prepare its people for lifelong learning before they leave the schools. Teachers must be made aware that changes in education are imperative for our times. They, as educational leaders, must be personally involved in education as a lifetime goal as well as an occupation. No attempt had been made to isolate attitudes of elementary personnel, and it was not known if teachers felt any obligation to begin instilling continuing education concepts in elementary school students. It had not been determined if elementary personnel were participating in continuing education programs.

Procedure

Through the cooperation of the Wyoming State Department of Education, 455 full-time elementary school personnel were identified in Albany and Laramie counties. Copies of an adult attitude scale, which had previously been developed and tested were sent to all 455 personnel requesting their participation in this study. Of the 455 attitude scales mailed, 344 were returned and 298 were found usable. The responses from this sample provided the initial data used in the study. From these participants, 88 were asked to take part in the experimental study, of which 41 persons completed the experiment so that comparisons could be made.

All of the experimental information was coded and punched on International Business Machine cards, as was the initial data for 298 participants. To insure accuracy the tabulations of the totals, means, variances and standard deviations were determined by the Philco 2000 computer. The data were then submitted to one of two appropriate tests, the "double-tailed T" or the "T test." This was done to determine the degree of change and its significance, if any.

Summary of Findings

Although a great deal of data were tabulated and processed, only the more pertinent information was consolidated in this summary.

Responses from Initial Data. Two hundred and forty-two respondents (81 per cent) had completed continuing education courses between 1955 and 1967. Their total scores on the attitude scale averaged 171 compared to an average score of 163 for 56 respondents (19 per cent) who had not completed a course. This was a significant difference at the .05 level. Most of the respondents, 188 (78 per cent), took continuing education courses for credit; 40 persons (16 per cent) had taken them for a combination of reasons, both credit and non-credit; and 14 (6 per cent) had taken only non-credit courses. Ninety-four respondents (40 per cent) took continuing education courses to satisfy a professional requirement, 47 (20 per cent) wanted to strengthen their teaching, 44 (18 per cent) to complete a degree, 43 (17 per cent) to satisfy a personal need, and 14 respondents (6 per cent) took courses to advance on the salary schedule.

Most respondents, 161 (67 per cent) felt the responsibility for continuing education programs should rest with colleges and universities. Only 54 (22 per cent) favored the public schools, 12 (5 per cent) said junior or community colleges, 7 (3 per cent) said business and industry, and 8 respondents (3 per cent) indicated other agencies should be involved.

No significant difference in total scores appeared between Wyoming and non-Wyoming graduates on this attitude scale.

The highest average sub-group scores appeared in sub-group two pertaining to the learning processes. The next lower areas in descending order were sub-groups three dealing with readiness and motivation to accept continuing and vocational concepts, group four concerning changes in society and the support of continuing education, and the lowest were in group one concerning adult and continuing education concepts.

Three categories were established on which to base further comparisons. These were age, experience and hours completed beyond the bachelor's degree. The younger age groups (under 50 years) recorded the highest total scores, as did those with less than 20 years of teaching experience. The highest scores were also obtained by persons with the greatest number of hours beyond the bachelor's degree.

Change in Experimental Groups. Forty-one participants from Albany (12) and Laramie (29) counties completed the experiment in changing adult attitudes. In Albany County the group met in two sessions with a film, lecture and small group discussions. In Laramie County the participants received the same materials presented in Albany County, but in written form only. No discussions were held, and the film material distributed was in written form rather than through actual viewing. Every attempt was made to present the same materials to both groups and to make equal the time spent in actual study and assimilation of the materials.

Upon completion of the final adult attitude scale, statistical comparisons were obtained by using the "T and double-tailed T tests." The .05 level of confidence was established as significant for this experiment.

Each experimental group averaged higher scores on all subgroup totals as well as the total score when tested by the attitude scale after completing the experimental study. Each group improved in their awareness of the concepts tested to a significant degree on total scores.

Six of the sub-groups areas showed significant changes in scores for the two low-scoring groups of respondents. The Albany County group showed no significant change in sub-group one while the Laramie County personnel did not change significantly in sub-group three. The high groups made growth in total points scored in all sub-groups, but the changes were not judged significant. Only the changes in total scores for these persons were at a significant level.

Both methods of disseminating information about the concepts tested on the attitude scale were significantly effective in changing total scores of both low and high groups. Neither method was judged more effective than the other when comparing changes made between low groups or between high groups. When, however, the total changes made by all Albany County experiment participants were compared with changes made in Laramie County, there was a significant difference. The Albany County method of small group discussion produced a significantly greater change in total scores than did the Laramie County method of mailed information.

CONCLUSIONS

As a result of the data obtained and the information analyzed, the following conclusions appear justified:

1. The adult attitude scale developed for this project appeared to satisfactorily measure elementary school

personnel attitudes toward the continuing education concepts in the scale.

2. Attitudes of elementary personnel can be determined and isolated concerning specific concepts.
3. Group discussion, lecture and audio-visual aids as a combined technique provided the greatest significant change in elementary personnel attitudes.
4. The dissemination of written materials did bring about a significant change in attitudes, but to a lesser degree of significance than the group methods.
5. Attitudes of both low- and high-scoring participants were significantly changed on total points scored.
6. Significant changes were brought about in most sub-group areas for low-scoring personnel by both experimental methods. No changes of significance were recorded in subgroups for high-scoring personnel by either experimental method.
7. Those who had been continuing education participants recorded significantly higher scores than those who had not participated.
8. Most continuing education participants were involved in work to satisfy a professional requirement.
9. Elementary personnel generally appeared willing to introduce the concepts concerning vocational and continuing education to their students.
10. Project participants appeared to be least familiar with

the concepts concerning adult and continuing education, and those dealing with changes occurring in society and the need to support continuing education as tested by the attitude scale.

11. Younger teachers with a lesser number of years in the classroom appeared to be most familiar with the concepts in this attitude scale. A greater number of graduate hours above the bachelor's degree generally indicated higher attitude scale scores.

RECOMMENDATIONS

On the basis of the findings reported in this project and the conclusions reached, the following recommendations appear justified:

1. Elementary school personnel need to be made aware of the vital and unique role elementary schools can play in developing the concepts of continuing education with young people.
2. The public schools must become more deeply committed to the cause of continuing education for both its young students and the adults in the communities served.
3. Specific in-service programs should be established to acquaint all school personnel with the role they can play in creating a school atmosphere where a "love to learn" prevails and carries throughout the student's lifetime.
4. The University of Wyoming and other colleges and universities should introduce specific study areas dealing with

continuing education on the undergraduate level. All students must leave with an awareness of our changing society and the significance of continuing education programs to prepare all citizens for these changes.

5. Studies should be conducted to determine what effect changes in teacher attitudes have in the learning situations and ultimately the attitudes of children in that classroom.
6. Studies should be encouraged to determine the effect a change in teacher attitude has on behavioral change.
7. Research should be undertaken to determine effective methods now in use in elementary classrooms which introduce continuing education concepts to elementary children.
8. Further studies must be carried out in attitudes and attitude change of both students and teachers. Some areas to be considered should include:
    - a. using other methods than those used here to bring about attitude change such as TV, video-tape recorders and the effect of other audio-visual devices.
    - b. equating as closely as possible the size of groups as well as group structure with a larger number of participants.
    - c. including experiments with all levels of respondents, not limited to high- or low-scoring participants.
    - d. experiments with longer or shorter sessions, more sessions with various techniques and devices used to

bring about attitude change.

9. A follow-up study should be conducted to determine the permanence of attitude change in the experimental participants or in any other short-term studies of this nature.
10. A state-wide program must be undertaken by the State Department of Education and the University of Wyoming to bring about greater understanding and support for continuing education programs, and how these concepts would be most effectively introduced in the formative school years.
11. The apportionment of state support for general adult and continuing education should be made on the same basis as that used for apportioning other state support for education.
12. The discussion technique should be more extensively used in working with adults, whether elementary personnel or other appropriate persons.
13. Concepts concerning continuing education can be developed by either method tested, but the lecture-discussion method is preferable in all cases.
14. One basic objective for elementary instruction must be the development of a "love to learn" which will carry throughout the lifetime of all students.

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SELECTED REFERENCES

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APPENDIX A

THE UNIVERSITY OF WYOMING
COLLEGE OF EDUCATION
LARAMIE, WYOMING 82070

ar Elementary Teacher or Administrator:

A department within the College of Education at the University of Wyoming is veloping an adult attitude scale with the cooperation of the State Department of ucation. Your cooperation in completing the enclosed attitude scale and returning PROMPTLY will be appreciated. Please return this NO LATER than February 16, 1968.

Thank you,
Arthur W. Burrichter
ARTHUR W. BURRICHTER
Graduate Assistant
Room 306, College of Education
University of Wyoming
Laramie, Wyoming 82070

PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY BEFORE BEGINNING!

is instrument is in two parts. The first part asks for your involvement at the present e in educational programs.

t II is the attitude scale. The series of statements have been drawn from several urces. In marking this scale, please make your judgments on the basis of what these ings mean to you. Sometimes you may feel as though you've had the same item before the scale. This will not be the case, so do not look back and forth through the items. not try to remember how you checked similar items earlier in the test. MAKE EACH ITEM SEPARATE AND INDEPENDENT JUDGMENT. Work at a fairly high speed through this scale. Do t worry or puzzle over individual items. It is your first impressions, the immediate eelings" about the items, that we want. On the other hand, please do not be careless, cause we want your true impressions.

re is how you are to use these scales:

you feel that the concept as stated is very strongly true, or untrue, you should ace your check-mark as follows:

:____X____:_________:_________:_________:_________:_________:_________:
Strongly agree   Undecided   Strongly disagree

OR

:_________:_________:_________:_________:_________:_________:____X____:
Strongly agree   Undecided   Strongly disagree

you feel the concept as stated is not strong enough to "strongly agree" or "strongly sagree" with, you may check any of the other boxes which more nearly represents your ings. If you are not sure about the statement as it stands, you may put an X in e "undecided" box.

DO NOT PUT YOUR NAME ON THESE MATERIALS

PLEASE TURN TO PART I

PART I

PLEASE NOTE THE FOLLOWING DEFINITION!

TINUING EDUCATION includes all educational activities (credit or non-credit) which ults pursue that are part time. Three elements form this common basis: first, purposeful d orderly education, not just accidental education; second, voluntary, one participates his own initiative and with his own motivation; and third, it is supplementary to the in responsibilities of life.

PLEASE PUT AN (X) IN THE MOST APPROPRIATE BLANK

1. In the past 3 years (1965-67) I _____ have
_____ have not
completed a continuing education course.

2. The continuing education courses I have completed during the past 3 years were for:

(1) _____ credit, (2) _____ non-credit, (3) _____ combinations.

3. My main reason for participation in continuing education courses was:

a. _____ To advance on the salary schedule

b. _____ To complete a degree

c. _____ To satisfy a personal need

d. _____ To strengthen my teaching

e. _____ To satisfy a professional requirement, i.e. a minimum number of hours to keep a professional certificate in force.

4. In my opinion, the responsibility for providing a program of continuing education should rest mainly with:

a. _____ Public schools

b. _____ Junior or Community colleges

c. _____ Colleges or Universities

d. _____ Business and industry

e. _____ Other (please specify) _____________

____

PART II

For each of the following statements please indicate with an (X) on the rating scale the position which most nearly reflects your opinion or position regarding the statement.

1. It is nearly impossible to change adult attitudes after 45-50 years of age.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

2. Elementary students (grades 1-6) are a little too young to become very concerned about lifelong education.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

3. Lifelong learning of one sort or another is essential or obsolescence takes over.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

Passing a test over material studied or reciting it back is evidence that learning has occurred.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

5. With advancing age it becomes increasingly difficult to learn new and unfamiliar materials or concepts.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

6. "Hard work" by an individual usually means he is learning well.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

7. Elementary school children (grades 1-6) should be taught certain concepts about the world of work.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

8. A few jobs require constant updating of skills while the majority of the population is "up to date" with a high school or college education.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

9. A child's learning is probably more meaningful to him than is learning to an adult.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

10. Given adequate motivation adults can master complex tasks as well as younger learners.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

11. An adult's ability to develop skills and understand concepts is generally less than children.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

12. Units or materials about lifetime occupations are very appropriately introduced in the elementary school. (grades 1-6)

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

13. Learning has best occurred when an individual can use it in unfamiliar or problem situations.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

4. Adults can learn as easily as the "younger set" even though the rate may be different.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

5. Learning can occasionally be "fun" but is usually pretty serious business.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

6. Strange as it seems, the higher the educational level one attains, the less apt he is to participate in continuing education.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

7. The idea that education is a lifelong process is too complex for elementary (grades 1-6) students.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

8. Adult education should receive general public support from tax monies just as we tax for pre-adult education.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

9. New insights are an effective reward for continuing learning.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

20. Academic areas in the elementary school (grades 1-6) are the single most important phase of the total program of elementary education.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

21. When confronted with unfamiliar problems adults are likely to give answers quite as self-contradictory, inconsistent, and naive as children do.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

22. The churches, businesses, homes and schools of America are remaining havens of stability today.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

23. An individual in today's world can usually acquire in his youth the bulk of the knowledge and skill necessary to live adequately for the rest of his life.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

The principle that adult learning should be optional is basic to our democratic society.

:_________:_________:_________:_________:_________:_________:_________:
Strongly agree Undecided Strongly disagree

Such every day activities as child raising, food preparation and leisure time activities do not change much during a person's lifetime.

:_________:_________:_________:_________:_________:_________:_________:
Strongly agree Undecided Strongly disagree

Adult education programs should be financially supported in a manner similar to elementary and secondary education.

:_________:_________:_________:_________:_________:_________:_________:
Strongly agree Undecided Strongly disagree

THANK YOU FOR YOUR HELP!

PLEASE RETURN THIS SCALE IMMEDIATELY IN THE ENVELOPE PROVIDED

THE UNIVERSITY OF WYOMING
COLLEGE OF EDUCATION
LARAMIE, WYOMING 82070

Dear Elementary Teacher or Administrator:

Approximately ten days ago you received an adult attitude scale sent out through the College of Education at the University of Wyoming. It is important that all teacher attitudes are represented for inclusion in our project.

Please fill yours out promptly and return it in the self-addressed envelope provided with the scale. If yours has been returned, please accept our thanks for your cooperation in this project.

Sincerely,

Arthur W. Burrichter

ARTHUR W. BURRICHTER
Graduate Assistant
Room 306, College of Education
University of Wyoming
Laramie, Wyoming 82070

APPENDIX B

THE UNIVERSITY OF WYOMING
COLLEGE OF EDUCATION
LARAMIE, WYOMING 82070

Working with elementary students as a teacher is a challenging and exciting experience. As a recent elementary teacher, I am aware of the uncertainty we often face when we ask ourselves, "How can I best change attitudes in my classroom?"

While you ponder this question daily in the classroom as a teacher, others of us are asking the same kinds of questions about ourselves as teachers. "Can an individual's attitudes toward certain concepts be isolated?" "Are attitudes rather permanent, or do they change with additional information?"

The Department of Adult Education at the University of Wyoming is conducting a study on attitudes and attitudinal change. As a professional elementary teacher in Laramie County, you have been selected to participate in this project. We think you will enjoy the four short articles you receive by mail, and ask only that you read these articles and then check an attitude scale included with the final article.

As a professional elementary teacher interested in the advancement of elementary education, we sincerely solicit your cooperation. Please return the enclosed card telling us you will cooperate in this project.

Thank you very much.

Arthur W. Burrichter
ARTHUR BURRICHTER
Graduate Assistant, College of Education
University of Wyoming
Laramie, Wyoming

Mr. Burrichter:

As a professional educator, I am willing to cooperate in this study.

________ Yes

________ No

Signed ______________________________

Number ________

A NEW IMPERATIVE FOR OUR TIMES *

Recognition of the essentiality for educating adults to insure the security, productivity, and adaptability of a society facing changing conditions is as old as recorded history.

In ancient times organized education was for adults, not youth. Most of the great teachers in history such as Confucius, and the Hebrew prophets, Aristotle, Plato, and Jesus devoted their energies not to the development of the immature, but rather to the mature mind. The great social movements that produced Western Civilization, the Judeo-Christian religions, the Renaissance, the Reformation, the democratic revolutions, the Industrial Revolution; all were founded on the ability of the adult mind to learn and change.

The American educational enterprise, however, has evolved the principle that adult learning is optional. Our traditional educational policy has been based on the assumption that an individual can acquire in his youth the bulk of the knowledge and skill required for him to live adequately the rest of his life. Accordingly, the educational effort of American society was concentrated, until quite recently, almost exclusively on youth. Beyond that, learning was left largely to the diffusion of knowledge through more informal means: books, communications mass media, and voluntary study groups. The few programs organized for the education of adults were concerned chiefly with remedying deficiencies in the education of youth, particularly in the areas of literacy, citizenship, vocational skills, and the use of leisure time.

Now a new note is appearing in American educational thought: adults must continue to learn; learning, like breathing, is a requirement of living. The assumption that learning is a lifelong process is based on a new fact of life: the accelerating pace of social change. For the first time in the history of civilization, the time span of drastic cultural change has been telescoped into less than the lifetime of the individual. The current generation of mature adults now represents the first generation faced with managing a culture different in kind than the one originally transmitted to them. The consequence of this new fact of life is such that the well-educated youth of today is an obsolete man tomorrow.

Obsolescence occurs visibly in regard to knowledge. The set of facts the present adult generation learned about nature, the human personality, the arts, and the ordering of human affairs has today been supplanted by a more complete and extensive set. More knowledge has been discovered during the lifetime of the present adult population than existed at the time of its birth. Furthermore, knowledge becomes obsolete in essence. Learned truths (such as, that matter is mass) become untruths in the light of advanced learning (matter is now defined as mass-energy).

In regard to skills, obsolescence is even more apparent. Technological changes require adults continuously to adapt to new methods of work, and often, even to new vocations. Such other everyday skills as those involved in child raising, food preparation, transportation, communication, health maintenance, and leisure time activity are constantly being modified.

We are in danger of becoming obsolete in other ways which are less visible, but even more tragic. The increasing necessity for a mobile population coincident with concentrated living in cities requires adults to learn new patterns, values, senses of belonging, and new ways of achieving personal identity repeatedly within a single lifetime. Such traditional havens of stability as churches, homes, schools, governments, businesses, and voluntary organizations are in constant flux, striving continually toward greater productivity and compatibility with modern living conditions.

The consequence of this sudden turn in the tide of civilization is clear: a society that makes its educational investment almost entirely in children and youth is on the way to becoming obsolete and is reducing its chances for survival. Therefore, there is new emphasis on the education of adults in America. This is why adult education is shifting rapidly from a marginal to a central concern for many educational statesmen; why legislators and educational policy-makers recognize that society now has as great a stake in the continued learning of adults as it ever had in the education of children. It is the reason the profession of adult education is searching its soul to ask, "Are we ready?"

In quiet ways but with rising tempo, for over a third of a century, the field of adult education has been preparing for a task, the immensity of which is yet only dimly seen. A 1957 census survey reported that about nine million adults were benefiting from formal instruction; other estimates indicate that at least another forty million were engaged in informal learning activities.

Unfortunately most of these adult learners participated only in spasmodic courses, rather than in a continuous plan of lifelong learning, and many millions more experienced no organized learning at all. The constituency of adult education has just begun to be developed; it will be full grown when American expects an adult to spend part of his time in organized learning as it now expects youth to attend school.

Adult education is young as a profession, being 34 years old as compared with the 84-year-old library profession, the 87-year-old social work profession, and the 103-year-old public school teaching profession. It has grown more rapidly in its first thirty-three years than did most other professions, but it is still only partly ready for the overwhelming responsibilities now confronting it. It is still geared largely to the conception of adult education as an optional activity in society.

If adult education is to fulfill its new mission as "an imperative of our times" the following conditions must be met:

1. There must be a national perception, especially on the part of those who control educational policy, of the essential role of continuing education in preventing human obsolescence and in preserving and further developing the American society.

2. The education of children and youth must be reoriented to a conception of learning as a lifelong process. Teachers in schools and colleges

must learn to teach youth so that they leave formal schooling (a) with an insatiable curiosity, (b) with a mastery of the tools of learning, and (c) with a commitment to continue learning through the rest of their life span.

3. The agencies of adult education must clarify their respective tasks of establishing between themselves orderly working arrangements and interrelated planning and to insure that the resources of adult education are used effectively in meeting the adult educational needs of individuals, institutions, and communities.

4. A coherent curriculum of adult education must be developed that provides for the sequential development of the knowledge, understanding, skills, attitudes, and values required to maintain one's effectiveness in a changing social order.

5. The corps of leaders and teachers of adults must be enlarged and provided with the knowledge and skills required for them to help adults learn efficiently.

6. A special responsibility is placed on the universities of the country to expand the resources available for research and advanced professional training in adult education.

7. Community agencies of adult education, especially schools and colleges, must upgrade the standards of professional competence required of those guiding adult learning, and employ personnel with these competencies.

8. There must be a national commitment to provide the resources and moral support necessary for the development of lifelong learning as an integral element of the American way of life.

* Adult Education, Jensen, Liveright, Hallenbeck

* *

THE CHALLENGE OF ADULT EDUCATION IN THE NEW SOCIETY *

Nearly five years ago, a bullet snuffed out the life of the President of the United States. John F. Kennedy has been on his way to deliver a speech. In it, he had planned to say something which is basic. He had wanted to tell his Dallas audience, and all of us:

> "In a world of complex and continuing problems, in a world full of frustrations and irritations, America's leadership must be guided by the lights of learning and reason--or else those who confuse rhetoric with reality and the plausible with the possible will gain the popular ascendancy . . . ."

In that speech he never gave, he labelled as "plain nonsense" the talk of those who offer "seemingly swift and simple solutions to every world problem." They would supplant "leadership and learning with ignorance and misinformation."

If the life of John Kennedy has meant anything for America, it has meant that he helped all of us to know that indeed there are no easy answers; that it is incumbent on all of us to gain a fuller appreciation of the challenges we face; that the burdens of our society are the concern of all of us.

In an earlier speech, President Kennedy reminded us that "the great enemy of the truth is very often not the lie--deliberate, contrived, and dishonest--but the myth--persistent, persuasive, and unrealistic . . . . We enjoy the comfort of opinion with the discomfrot of thought."

It is this "discomfort of thought" that constitutes the basic challenge of adult education today. We cannot much longer endure the persistence of myths and cliches and prejudices that surround the major issues of our times.

John F. Kennedy helped destroy some of these myths--including the one that a Catholic could never be a President of all the people. In his person and his actions, he made the term "politics" seem right again.

The nation is fortunate indeed that both John Kennedy and his successor have been, in effect, great adult educators. They have helped Americans to understand better the nature of today's challenges. They have used the great moral influence of the highest office of the land to prick the conscience of America and to seek their personal involvement in meeting such challenges.

There is, or course, a fine line between enlightenment and indoctrination. We must be wary of vesting in government unbridled powers of molding public opinion.

But the New Society--the Great Society, if you please--does require greater citizen understanding and greater citizen participation.

It is good for America that the White House has made civil rights a great moral personal issue, as well as an issue for Congressional enactment.

It is good for America that they now understand there is indeed an "other America"--the America of 30 million in poverty.

These two related issues--civil rights and the war on poverty--constitute the true challenges of our times: bringing a fifth of our people fully into the mainstream of American society.

In meeting this twin challenge, adult education must play an increasingly effective role at three levels of participation:

1. It must help reach those who have been the victims of poverty and discrimination with more imaginative and more effective programs of basic education, training and self-advancement.

2. It must help train the new leadership, especially lay leadership, required for the effective implementation of new programs in the fields of poverty, human rights, and related fields.

3. It must more effectively reach all Americans--white and colored, poor and non-poor--with programs that will help them understand the changes that must come, the roles they must play, the contributions they must make.

One common thread goes through each of these levels--involvement of people and groups not previsouly reached. Adult education will and should continue reaching the established and the comfortable. Interior decorating and modern dancing are parts of the Great Society, too. But, first and foremost, adult education can help usher in the new society by reaching a new clientele, the clientele of the poor and the forgotten.

It will take new ways to reach the clientele. It will take new ways to teach this clientele. This is your challenge.

* Hyman Bookbinder in Adult Leadership

ADULT EDUCATION, ANYONE? *

by

Brant Shoemaker

Professor of English, the Ogontz Campus
Penn State University, Abington, Pennsylvania

The other day I was visiting the home studio of an artist friend when one of her five children bounced in, chattering our heated discussion on the merits of Renoir. Another heated discussion immediately took its place--this time between mother and daughter: to practice or not to practice the piano this afternoon. This discussion ended as you would expect. "One hour of practice for you, and afterwards you will be allowed to go to Mary's house to play."

I doubt if one person in ten would have the child run off without her non-credit lesson. Yet when it comes to adult education, we often think people are "silly" or "putting on airs" just because they smear a dab of paint on a canvas. And, especially among my colleagues in the academic world, the whole adult education effort is all too often dismissed as "basketweaving"--unless it leads directly to a college degree.

Academic people--the very persons most often called upon to teach adult education courses--hold this attitude because they are accustomed to strict control over the student's efforts and his objective--the all important college degree.

But if Mrs. Able cannot make it for her Tuesday night class (it's eight year old Jimmy's birthday), she smilingly reports this to the instructor without the slightest twinge of conscience. Why? Because her objective is different from that of the degree seeker.

And why not? It is high time we asked this question reasonably and not archly. In an era when credits, degrees and graduate work are central to a life that burrows in, that specializes, what can we think of these "silly" people who are burrowing out?

Mrs. Able is not pursuing her studies for credits; she is not studying to gain a vocationally oriented degree but to broaden her life. On occasion, therefore, some other part of her life may be more important than her Tuesday class. She needs what the instructor offers, but it is not her only need or responsibility. In a word, she puts her studies in their place--and a very high place. But in all reason, it cannot be the only place.

Enrichment

Personally, I think the world of the adult education students who are burrowing out! About ten years ago I had the honor of teaching literature to a "young" lady of seventy-four. She came to her evening class as if to a concert or stage play; she dressed accordingly, took her seat (first row, center aisle) and awaited curtain-time. This lady, mother of several children, grandmother of many more, came not to stack up credits but to enrich her life. Another mother, a regular viewer of a recent television series, wrote that the poetry program "lifted her mind from the dishpan to the skies."

Have we not lost much of the joy and wonder of life as we have become diploma-conscious? We have contracted the term education into the cramped position of meaning specialization. And shouldn't it mean generalization? or expansion? and, above all, enrichment?

Perhaps so many of us have grubbed and plodded along the road to degrees, with the only signposts reading dismally: "eighty-four credits to B.A.," "Turn right at M.A. for Ph.D.," that we are jealous of those with an innocent love to experience more and more of life through an appreciation of the arts.

It is foolish to suppose that at seventy-four that dear lady would become a great critic or writer, but she had learned better how to appreciate writings that formerly had been unnoticed by, or beyond, her. And the mother chained to her dishpan, would she astound us with flights of poetry? Maybe not--but surprisingly often she will! We cannot all be Artur Rubinsteins, but, by learning to play a little, we can better appreciate his great playing. Such studies give us new directions, new insights, new hopes.

Incidentally, my artist friend with the five children "discovered" her art talent only after the children had come along. She felt "engulfed," started art classes and is now giving showings of her superb paintings.

* Adult Education

A LIFETIME CONCERN *

by

Grant Venn

Work can no longer be considered as merely the contribution of labor to the development of production; it must be thought of also as the psychological basis for the individual's place in society. The man who is unemployable has little opportunity to respect himself or the contributions he can make. He becomes a drag on society, economically, politically, and psychologically.

Occupational education must therefore become a fundamental part of the total educational program for every individual.

Our complex and changing society depends on the full development of every individual. Every time an individual falls short of his potential, the community loses, the state loses, and the nation is poorer for it.

Revising Our Concepts. Here in America we look to our schools to give the individual the opportunity to develop to his fullest. Once we thought we could accomplish this by having the student spend a certain number of years in school; now we know this is no longer adequate. We thought that graduation meant the completion of education; now we know it is only the commencement of learning for nearly everyone.

At one time we were not overly concerned about the fact that 30 per cent of our young people were not graduating from high school; we thought a student could drop out, get a job and live a satisfactory life; today we recognize our dropout rate as a disaster.

Once we thought that full employment would result from a growing economy, that our manpower needs could be met by unplanned development; now we know that education is a bridge between man and work, that our occupational education effort must be doubled and redoubled to provide needed manpower.

We know that if our educational system is to continue to be the chief source of preparing youth for the world of work, it must assume the responsibility for helping youth make the transition from school to work. Our schools and colleges must make learning how to work an integral part of their programs by giving students work experience.

Crucial Years. Work experience is especially essential for the non-college bound student who will enter the work force when he is graduated from high school; but essential also is an exploratory occupational education program for students at the elementary and junior high school level. It is at this level -- in the seventh, eighth, and ninth grades -- that approximately 30 per cent of our school dropouts occur. Thirty per cent of our students are thus cut off from the mainstream of education, they are denied the background that makes it possible for them to continue, and they miss the opportunity to become involved in vocational programs in high school. Their interests are never aroused or stimulated and, as a result, their opportunities for the future are severely restricted. These are the individuals who eventually become problems of society, the unemployed, the welfare cases and the criminals, or at best, end up in the so-called remedial programs operated by federal agencies outside the educational system.

Our failure to provide exploratory occupational education at the elementary and junior high school level could in the long run result in three educational systems instead of our present two -- private and public schools. Eventually our educational structure might be made up of (1) private schools to which the wealthy could send their children; (2) special schools for youngsters segregated because of family income or educational failure; and (3) a public school system serving for many students only as a selector and judge, eliminating them from the mainstream of education.

If this trend were to become entrenched, we could find ourselves in a sociological and political situation where the great strength of the country, which developed in its middle class, would disappear.

Education in a Broad Sense. Since the strength of our society depends on the full development of every individual, we must gear our educational system to the concept of continuing education in its broadest sense. This problem was posed in an excellent framework by Secretary John Gardner when he wrote:

> "The successful transition of young people from school to job will become easier to accomplish as the artificial wall between the schools and the outer world breaks down. Fortunately the wall has been crumbling for some time, and is certain to disintegrate further. The vast development of industrial, military, and other education programs outside the formal system is striking evidence of that fact . . . . Also disintegrating is the notion that education is something that goes forward with no interuption until it is capped by some sort of graduation ceremony, whereupon it ends forever. We are coming to recognize that education must be lifelong, that it may be interrupted at many points, and that it may take place in many settings."

Outdated. But our educational system in its present form is not well geared to this broader concept of continued learning. It emphasizes full-time education, given over a fixed period of time, offering a prescribed program of courses, and ending at a set termination date. It is based on the outdated concept that most people can be educated during the period of youth.

By contrast, a good vocational or technical program will have as many (or more) students engaged in extension work as in preparatory work. This goal has already been achieved in many of the existing programs.

As more and more occupational education finds its way into higher education, will our colleges and universities respond to the need for a vigorous extension program with the flexibility to meet the needs of the people it must serve? New concepts, attitudes, and patterns of operation will be necessary.

There are a number of things that could be done to reach these ends.

One of the first changes we need is a new concept of just what comprehensive education is. We talk about comprehensive high schools and comprehensive education in this country, but I do not think we have a single comprehensive school in the nation. If comprehensive indicates programs to take care of the needs of all the individuals, then I can't quite see how we can continue to say to the youngster, "If you are not learning, you shouldn't go to school." We are still pushing out of our schools over one-third of the young men and women of high-school age in this country. Comprehensive education is going to have to provide new programs, new courses, new flexibility, so that every youngster has a chance to learn. And this is something new.

I think we need to have also a new concept of occupational education. The nature of work has changed so much that we can no longer think of vocational, or technical, or occupational education as the teaching of a set of basic skills which prepares the individual who has learned them for a permanent place in the work-world. This is simply not going to be true, because the average person is likely to change jobs four or five times during his work-life.

Another problem that we must attack is how we can provide training for every single youngster who attends our educational institutions. Every single one! The gifted child is quite well cared for, because we know how to get him into college if he is gifted. Not only do we give him the professional-vocational skills that he needs, but we put him in the job, we follow-up, and we move him into a new job if it is necessary. We do this for the 20 per cent that graduate from college. We do not do it for those who drop out of college, nor for any of those in high school except the college bound. And we generally make no attempts to offer such service.

Another major objective in facing up to the problem of education is accepting learning as the major purpose of education, regardless of where it takes place. For years we have had the idea that to learn, one must sit in a seat, one's own seat, for one hour or 55 minutes, for six periods a day, and if a student is not in this position, we have practically said, "You can't learn."

I think we must recognize that regardless of the subject matter we teach in school, we must remind all persons who graduate from school, whether it be Harvard Graduate School or any other school, that change is rapidly taking place and that each student must cope with this change and prepare to change with it. Why can't we devise some way to measure the learning that can take place on the farm, in the factory, in the store, or any place so that the individual can come back into the educational mainstream and continue to learn? Fundamentally, what we say is that we respect learning, but we respect it only when it takes place in certain areas and under certain conditions. Until we change this, I don't think we are going to accomplish our job.

The Establishment of Exploratory Occupational Education Programs and Concepts at the Elementary Level. These programs could be developed as part of the subjects which all children take while they are in elementary and junior high school. The idea would be to provide youngsters with all kinds of information on possibilities for future education and to broaden their occupational horizons and concepts about work. At this age, students could be introduced to the many varieties of jobs that are available and what future they hold. There would be no attempt to force a vocational choice; the aim would be to provide for all children a bridge from elementary and junior high school to high school vocational programs, pre-technical programs, college preparatory programs, or general programs.

A nation-wide work-study program that would give many young people still in school an opportunity for work experience. Few youngsters, it appears, have the chance to get work experience in today's world. At the same time it is obvious that much work needs to be done. Students could begin in much the same kind of programs as those offered in the Neighborhood Youth Corps -- with the exception that related studies would be tied to the work experience. The work experience would become a regular part of the school program.

Schools should recognize the value of developing good work attitudes and habits that will stand their students in good stead in the future, and should give credit for work experience. It should become a part of the high school record, recognized in the same manner that work experience at the college level is recognized by business and industry.

If we accept the concept that flexibility and continued learning are going to be needed by every citizen in the future, then it is essential that we not only get our young people into our public educational system but keep them there. Only in this way can they become effective and remain effective throughout their adult lives.

* American Vocational Journal and School Shop

TO TOUCH A CHILD

The Mott Foundation

This dramatic film illustrates the needless waste we permit in schools across the country each day and during vacation when the "lights go out." Nearly 100,000 buildings become islands within a community where no one is able to go for further education, recreation, or leisure time activity. Billions of dollars worth of public buildings remain empty and unused.

The story of one school--Cook School--shows what can be done when a community sets about to end this needless waste. Up until the time of this film, the needs of adults and the home problems that existed were of no concern to the community.

Some members of the school realized that when children come to school their backgrounds came with them, whether they were good or bad. Vividly illustrated is the child whose father is out of work and its effect on her. The boy whose father is gone a great deal, and his need for a masculine immage is shown, as are other typical cases found in each school.

However, this school remained empty all summer, ignoring the needs of everyone--including the old and lonely, people in need of retraining programs, children, etc. The taxpayers found the schools to be a "burden" for the children of strangers, and expressed their feelings at the poles when it was time for a bond issue. Every bond issue was turned down, and no new buildings or additions had been approved for years. Children also found the schools a cold and undesirable place, and damage to the buildings and school property was consistently heavy.

One summer a little boy was playing near the school in the street, when he met the physical education director. This man told him to go ahead and play *on* the school grounds, and that if anyone asked him about it to tell them that his parents were paying for the schools. Some adults began to see the potential, and set about to make the schools true community centers.

As the physical education director explained it, why should you settle for *nine months* of school for $50.00 worth of taxes and a *total* of 1365 hours when you *could add less than* $3.00 to your tax bill and get *12 months* of *day and night* use and get *2535 additional hours a year*. The idea was planted, and all that was needed was some financial support to get it started. This came from an industrialist who wanted to begin a boy's club in an empty building. He offered $6,000.00 to the board of education to start the program in five schools. The board accepted and let the people decide what they wanted.

The people reached out for what they wanted, such as recreation, self-improvement, and companionship. Of course, opposition arose from some areas--some said the school must have "standards," but the paper supported the idea and a hugh turn out responded the first year. Five schools were unable to handle the program, and the following year it was expanded to 15 schools. Eventually all schools became community centers, and people realized that the most expensive area (gymnasiums) when empty was one of the most useful as a community center.

People came for many reasons--some to learn baking, or sewing, or update their job skills, or play cards, or lose weight, etc. Many of those same people stayed on to earn a high school diploma. Classes were requested in English, foreign languages, etc., which were provided.

The community soon discovered that all their best efforts were in vain if the health of the community in general (children in particular) was not good. They undertook to diagnos and treat the illfeed, the physically handicapped, and to help illiterate parents. The community had a base for attacking these problems through its community schools. Self-help was encouraged, and in the first year over 60,000 correctable defects were discovered. The number of "health-guarded" children increased ten-fold in the first three years of the program. The people of the community helped with these health programs, and classes were conducted for expectant mothers, nutrition, home management, etc.

The community agencies and schools now began to work together in closer cooperation. Scouting programs, Big Brother, Big Sister, use of park facilities, and other areas became a basis for close cooperation. The churches, YMCA, social and civic clubs all made use of the schools. Parents, teachers, and community agencies became a closely working group for the first time.

The changes resulting from this cooperation showed up at the poles. A bond issue now passed by a 4 to 1 vote, and the first new school was built in 20 years. It featured a hard surfaced-lighted playground for use day or night, a library for the community it served, and it catered to concerts, public forums, cultural activities, etc. Roller skating was carried on in the gym, and older adults were encouraged to come for social activities.

Older schools now added community centers, and a community school director was hired to work with principals and community forces to shape programs for all. Examples of programs which were soon underway were "tot-lots" for use in the summer, pee-wee baseball, teen clubs, vocational training for adults, continuing education courses, and a wide program for senior citizens which provided social outlets and activities. These community centers were "naturals" for older adults because of the easy walking distance to their homes.

In Flint, Michigan where Cook School took the initiative for the first program, the city of under 200,000 people had 83,000 people in 3600 after school and evening programs. The adult evening enrollment is larger than the daytime enrollment in the cities largest high school.

As a result of these programs, the drop-out rate has dropped to where 80 per cent now stay in school, where credit and non-credit courses are offered in abundance. This community built and opened a new college (Flint Community College) of more than $25,000,000 paid for on the day it opened by voluntary contributions from the community.

Something happened in Flint, Michigan which welded people into a community. This same thing is now happening other places, after seeing the initial program supported by Charles Stuart Mott--the industrial leader who started it all.

This touching film illustrates the concept that through open school doors you can touch the community. The community touches the homes, and homes touch the hearts of children.

ADULTS CAN LEARN *

by J.R. Kidd and J.R. Gibb

Homo sapiens is a strange being! Most of us, on the one hand, say that the thing which most distinguishes man from other animals is that he is able to learn, to profit from experience, to adapt, to innovate in a m nner markedly different from other living inhabitants of our world. A chief attribute of the human being is learning. At the same time, when we speak of learning we do so as if it transpired only in a few brief years of life, something associated with childhood, that can be likened to childhood diseases, like measles.

Adults can learn! They continue to learn throughout life, right until the time when life itself is passing. Adults are, or can be, effective learners. Of course there are great differences between individuals; and the success of any learner, youth or adult, is bounded by his innate capacities. But few, if any, adults have ever approached their potential achievement in learning. We need to remember that the stoutest shackles binding an adult learner have little or nothing to do with age; they are self-imposed.

Adult learning has always gone on. But only in relatively recent times has effort been directed to systematized means for adult learning, or has there been any attention to the way adults learn. The self-learner, the man or woman who would continue to study and grow on his own, has always been known in history and literature. However, most organized efforts in adult education, in by far the majority of cases, were directed to remedial tasks, that is, helping an adult to gain the kind of education that he ought to have been able to have as a child.

But today learning for adults goes far beyond the remedial: it deals with all the intellectual and spiritual needs that a man or woman possesses at any time of life. Education conceived as providing the adult with something he missed as a child might be planned as an adaptation of materials and methods designed for children, although this approach was rarely successful. But an education planned for free men and women, and for all their pursuits and interests, can never be designed on some childish model, or on any model other than what is suited to the learner himself.

Someone has said that the most important development of the nineteenth century, because of its influence on everything else, was the establishment of free and universal schooling for children. Of course the idea was never fully achieved anywhere and at best was limited in application to a few countries in the "Western world." A parallel phenomenon in the twentieth century is the recognition that all life is for learning, and the gradual organization of this idea, not just in a few countries, but in every part of the world. In some countries of the world, in the face of stark problems of ignorance, disease, and malnutrition, education has first been provided for parents, only later for children. In many countries--both those that are developed and those that are not--adult education is not considered a luxury or amenity, it is a social necessity. Indeed, one of the new problems respecting adult education is to balance the motives and goals of the individual who is learning with the demands and needs of society.

Adult education, then, has become an extensive activity, and it seems that we are just at the beginning. A great many people are engaged full time in work directly related to the learning of adults--for example, teachers in nightschools, librarians, managers, foremen, coaches, counselors, agricultural extension agents, trade union educational officers, program directors in social agencies. These practitioners have been trained usually in some field other than that of adult education. We do not mean to argue that adults are of a different kind of species than are children, but simply to emphasize the obvious, that learning theory and practice should be concerned with the person as he is--not as he was, or may become. We need to give attention both to the quantitative and qualitative differences between children and adults as well as stress underlying continuities.

Learning must be problem centered. For the most significant kinds of learnings that adults do, the problem must be a problem for the learner, not a problem of the teacher. When the learner sees a real problem he is motivated to seek some kind of solution.

Learning must be motivated. The problem serves to provide energy, direction, and sustaining force to the activities of the learner.

Learning must be experience-centered. All sensory input to the organism is, of course, "experience." The problem for the teacher who is to develop a climate for learning is to help provide the optimal kinds of experiences that will relate to the problems of the learner. The learner must get data upon his problem. A joint responsibility of the teacher and the learner is to create a climate which allows the learner to accept the experience as learningful.

Experience must be meaningful to the learner. The experience that bears upon the problem must be suited to some degree to the learner's innate capacity to perceive, his age, his interests, his readiness, and his capacity to understand.

The learner must be free to look at the experience. Learning is a social experience. Learners learn from others in social situations. The learner who is emotionally and psychologically free to look at experience is ready to start on the process of acquiring the necessary behavior with which to learn and to grow.

The goals must be set and the search organized by the learner. Several experiments indicate that the active learner is a more effective learning organism than the passive learner. In order that problems be problems to the learner, it is significant that the goals of the broad learning quest be set by the learner. The learner must be free to make errors, to explore alternative solutions to problems, and to participate in decisions about the organization of his learning environment.

For maximum learning the learner must interact with other learners in such a way as to expose his attitudes and gaps in knowledge and skills to himself and to others.

The learner must have feedback about progress toward goals. Students of learning have long emphasized the importance of knowledge of results in acquiring skills. Evaluation of progress toward goals, particularly when goals have been set by the learner, is highly important.

* How Adults Learn and Handbook of Adult Education in the United States

One of the most rewarding stories we have heard about adult education came out of the quiet confession of a mother and father. Their teenage son was at that sensitive age when he was desperately trying to find some meaning for his life and apparently couldn't. Since there was no communication between them because they did not understand the boy and he did not understand them, he had turned to other people for help; unfortunately, the wrong sort of people.

These parents were good people but their interests were limited. After the day's work they usually turned to those leisure activities that came the easiest. It did not occur to them that leisure could be used for growth and stimulation. They were intelligent enough, however, to suspect that something was not right. By chance, they read in their newspaper about the growing interest in adult education in the United States. A few days later the mother picked up a prospectus of University Extension courses describing the variety offered, the simplicity of enrollment, and the small investment involved in dollars and cents.

As this couple explained it, they were actually bored with the easy and meaningless entertainments they had been using to fill their leisure hours. Simply because their activities had been labeled "entertainment," they had assumed they were being entertained. Fortunately, the prospectus on extension courses began to open their eyes to a whole new world.

"So," as they related it, "we decided to give adult education a try. After all, it cost so little and demanded no commitment of us beyond what we ourselves were willing to make. It was all up to us; no one was going to stand over us or force us. The responsibility was our own and we could take it or leave it, and there would be little lost in case we should decide to leave it."

They chose not to leave it, but to take it, and discovered a surprising world of "pleasure" in learning which they had not known existed. It was the supreme pleasure that comes as a result of making an intelligent effort, of marching forward instead of leaning back, of giving something instead of always receiving.

They had reason to be delighted, but the ultimate reward that gave them the greatest satisfaction--a reward on which they had not even counted--was the effect their new program of learning had upon their son. These parents discovered that by broadening the horizons of their native intelligence through a program of channelled, productive study, they gradually gained a better understanding of the boy's problems. They began to realize the extent to which their son, growing up in a world of new complexities and values, had been looking to his parents for guidance and help in his growing confusion. But their own boredom, their own sense of futility had made the boy look upon them with distrust, perhaps even shame. He wanted to be proud of his parents; he wanted to respect them. Instead, he only succeeded in sharing their boredome.

With the change in his mother and father, the boy discovered he too was changing. Instead of maintaining an air of sullen secrecy, he found that he and his parents were recovering the ability to communicate; and, with communication restored--even in its initially limited form--mutual understanding and respect were reborn. The realization dawned upon the parents that their son's problems were real (and manageable) and could no longer be simply deplored or shrugged off. In their acceptance of this fact--and this seemed to count the most--their son began to recognize both their goodwill and their authority. Through their own efforts of self-discipline in their desire to learn and to enjoy the worthwhile, their son discovered the meaning and purpose of discipline for himself.

What happened to this one family is in no way a miracle. It was simply the process of individual growth and maturity in action. Adult education, as people are becoming more aware, is not merely a means of achieving self-respect, but also a means of preparing oneself for the respect of those who need and long for understanding and guidance.

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* *

THE NEED FOR ADULT EDUCATION--SOME MAJOR THEMES *

by

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What is the "case for adult education"? Why do we need adult education in a free society? Why is adult education a new imperative for our times? These are questions that American adult educators and others have been attempting to answer since the 1920's. There have been articles in the journals, sections of books, and other publications that have concerned themselves, either directly or indirectly with this topic. Most recently, The Commission of the Professors of Adult Education has authored a report, "Adult Education: A New Imperative for Our Times," as their contributions to providing a rationale for adult education.

Let us consider and explore briefly some of the major themes that seem to underlie "the rationale for adult education in a free society." The following classification is presented as one of a number of ways to categorize these themes:

1. The nature of our free society.
2. The nature of the world we live in.
3. The nature of the educational process.
4. The nature of the Good Life.
5. The nature of adult needs and responsibilities.

Nature of Free Society

Perhaps that general theme which has been most widely used to support the case for adult education relates to "the nature of our free society." The assumption underlying this theme is that a democratic society makes special demands on the individual. These demands are of three types (and each of these types has important implications for adult education). They are: (1) the demand for educated adults--adults who can exercise their responsibilities of citizenship in an enlightened and responsible manner; (2) the demand for adults who have an understanding and appreciation of freedom; and (3) the demand for adults who can exercise effective leadership.

Until the 1920's most educators assumed that the formal education offered at the elementary and secondary level was adequate to prepare the individual for responsible citizenship in a free society. However, in the 1920's a number of respected members of the intellectual-academic community began to question this assumption. Since that time, this assumption has been increasingly questioned, especially by adult educators. They note that forty years of universal education at the elementary and secondary level has not given us an enlightened and responsible electorate. This, they feel, indicates that "educating for citizenship" is a continuing process and hence a major responsibility of adult education.

Two of the assumptions that underlie the democratic ideology are: (1) belief in the dignity and worth of the individual and (2) belief in the rationality of the individual; however, both of these assumptions must be qualified with the word potential. An individual must earn or win his dignity and worth and realize his rationality through disciplined and enlightened living. But a free society can only continue to exist as its members reflect the attributes of "dignity and worth" and "rationality." Thus, the implication of living in a free society is that an adult must go on learning--must accept education as a way of life--so he can become what he potentially is.

Freedom is related to the foregoing but focuses on a specific aspect of democracy. The concept of freedom is the sine qua non of democracy. Unless individuals understand and appreciate the meaning and nature of freedom, our free society is doomed. However, we are continually being made aware that the great majority of our citizens do not either understand the meaning of freedom or appreciate the inexorable nature of the relationship between freedom and democracy. For example, Professors Silver and Hagstrom, in a recent issue of the British Journal of Sociology, ask this question: "Can individual freedom survive in a country where most people do not support it?" More exactly, do legal guarantees of such freedom remain effective when only a minority voices approval of them.

This poses two challenges for adult education. First, there is the problem of educating adults to understand and appreciate the nature and meaning of freedom in the context of a free society. Too often "practical considerations" ("protecting" society from Communists or adults from salacious materials) win out over the abstract principle of freedom, and the right of free speech is abridged or strict censorship laws are passed. Thus our basic freedoms are slowly eroded away. The essence of responsibility in a free society is to understand and appreciate those abstract principles which underlie the democratic way of life. But this requires intelligence, rationality, sophistication and enlightenment--it requires accepting education as a way of life.

The second challenge is related to the first. The adult must not only understand the ultimate principles which underlie democracy, he must be a responsible moral and intellectual agent. He must be able to provide moral guidance for his children so the state will not have to impose strict censorship laws. He must be sophisticated enough not to fall prey to Communist propaganda. The antidote to increased government control is the enlightened and responsible citizen.

Education for effective leadership is concerned with those who have leadership responsibilities in our free society. As Herbert J. Muller has pointed out:

> The problem today is not merely a matter of improving the minds and tastes of common men. It is also a question of whether the elite can provide better political, intellectual, and spiritual leadership than it has in all previous societies. For if the creative achievements of civilization have been due primarily to the elite, so too have the failures of civilization.

Today as never before, our free society needs an enlightened, responsible and creative leadership. We need leaders who will give our democracy direction and a sense of mission. And we need leaders throughout our society at all levels. However, responsible, enlightened and creative leadership depends upon individuals who are educated--and who have accepted education as a way of life.

The World We Live In

A second general theme which underlies the rationale for adult education relates to the nature of the world we live in. The world of the 1960's has three dramatic characteristics, each of which has important implications for adult education. It is: (1) a rapidly changing world; (2) a revolutionary world; and (3) a world in crisis.

For the first time in the history of civilization, the time span of drastic cultural change has been telescoped into less than the life-time of the individual . . . the consequence of this new fact of life is such that the well-educated youth of today is an obsolete man tomorrow."

There are a number of consequences that result from living in a rapidly changing world. For example: (1) knowledge becomes obsolete; (2) the adult must adjust to a new mode of living; (3) tensions arise from cultural lag; and (4) the insecurity and anxiety of a society and culture in transition increase.

These consequences and many more make it increasingly imperative that the adult accept education as a way of life, so he can understand his changing environment and make a successful adaption to it.

The second characteristic of the world we live in--a revolutionary world--is closely related to the one above. However, the emphasis here is on the economic, political, technological and scientific revolutions that have characterized the twentieth century. We are truly living in a revolutionary age. The most important fact about these revolutions it that it has put unparalleled power into the hands of the many and the few. In general, though, the net effect of these revolutions seems to have been to provide an increasing opportunity for the masses of men to exert some control over their destiny. Whether they will seize this opportunity depends primarily upon whether another revolution takes place--the revolution in education.

It is a depressing but obvious fact that the knowledge exists (as well as the means of communicating this knowledge) upon which to build a better society and a more meaningful life; and yet the average adult has not availed himself of this knowledge.

It is also a depressing fact that the power which has been unleashed by these revolutions, if not handled in a responsible and enlightened way, could well mean the end of world civilization as we know it.

Nevertheless, adults can be educated to live in a revolutionary world--they can be educated to make use of their new-found power in a responsible and disciplined manner.

A World in Crisis

This is a world in crisis. The crises confronting man in the 1960's include: (1) the threat of the bomb; (2) the challenge of Communism; (3) the threat of a population explosion; (4) the threat of a decadent materialism; (5) the tide of rising expectations; and (6) the rise of militant nationalism. Any one of these crises would be enough to challenge the creative resources of man in ordinary times. But we do not live in ordinary times. As C.P. Snow points out: "The danger is, we have been brought up to think as though we had all the time in the world. We have very little time. So little that I dare not guess at it." The time has finally arrived when each adult must appreciate the true significance of H.G. Wells' statement that: "Civilization is in a race between education and catastrophe."

"Adults must continue to learn; learning, like breathing, is a requirement of living." I do not mean to imply that education will save civilization; only that without it we are facing certain catastrophe. Accepting education as a way of life is the last best hope of mankind.

The Educational Process

The nature of the educational process, as viewed by the adult educator, is the "capstone" which supports the other themes that underlie the rationale for adult education. In the most general terms, a functional approach toward education is adopted.

The functional approach has a radically different perspective on the educational process. The chief characteristics seem to be:

1. Education is viewed in behavioral terms--in terms of the significant differences that come about in the behavior of the learner. The criteria of whether education has taken place is whether there have been significant behavioral changes in the learner.

2. Education is viewed as a continuing process. As J.K. Hart has put it: "Education goes on whether school keeps or not." And there is a strong possibility that the most significant learning (in behavioral terms) takes place in the home and the neighborhood.

3. The education of the immature is seen as only one phase of the overall educational process. The principle of life-long learning is emphasized.

4. Education is seen as a consequence of the meaningful experiences we participate in. In W.H. Kilpatrick's descriptive phrase: "We learn what we live, we learn each response as we accept it for any living purpose, and we learn it in the degree that we live it."

5. The learner is viewed as playing an active role in the learning process. The most important type of education is self-education.

6. Any improvements in education will depend primarily on the attitudes that people adopt toward education. In the last analysis, it is the personal commitment that each individual makes to accept education as a way of life that is all important.

Four Themes

Four specific themes seem to support the case for adult education. They are: (1) the functional nature of education; (2) the continuing nature of education; (3) the experiential nature of education; and (4) the relationship between maturity and education.

There are four aspects of the functional concept of education which seem to have important implications for adult education. These are: (1) the idea that "education goes on whether school keeps or not"; (2) the central role of the learner in the educational process; (3) the view of education as a continuing process; and (4) the experiential nature of the educational process.

What are the implications for adult education of the fact that "education goes on whether school keeps or not"? There is one extremely important implication. That is the major role that parents play in the education of their children. On this point, Max Lerner has said:

> At the risk of shocking some people, I would like to say that a home without books and ideas can be almost as bad for a child as a broken home, an alcoholic home, or a criminal home, because it leaves a vacuum into which rush corrupting values.

However, parents themselves must be educated and accept education as a way of life, if they are to provide a home environment in which their children will be stimulated to accept education as a way of life.

The functional view of education also places the primary responsibility on the individual to acquire an education. The individual must play an active role in the educational process. This means that an adult must make a personal commitment to education--accept education as a way of life, if he is to become educated. There is no royal road to learning; only a sustained, systematic and disciplined effort by the individual will achieve significant results.

Robert Redfield has said: "An educated person is one who is continually at work on his own enlargement." There are a number of reasons why learning is a life-time process--why we must be "continually at work on our own enlargement." First, there is so much important knowledge to be learned--it will take a lifetime to acquire. Second, as has been pointed out earlier, knowledge becomes obsolete in this changing world. Third, we must be continually adapting to new conditions which require new skills and knowledge. Fourth, learning takes on significance in terms of a unique experiential context. This means we cannot learn certain things until we have been subjected to a unique set of experiences. And fifth, in order to achieve growth--to realize our latent potentialities--we must be continually involved in our intellectual development.

The important implication of this point for adult education is that some of the most significant learning experiences will take place during the adult period. Therefore adults need the opportunity to acquire this learning in a systematic and organized manner, i.e. within the framework of programs of adult education.

A basic postulate of the functional orientation toward education is that learning takes place as the result of meaningful experiences. The individual learns as he is confronted with a problematic situation in an experiential setting that has meaning to him. From this point of view, the formal classroom is antiseptic as far as meaningful learning experiences are concerned (although a good deal of memorization may go on). Thus, the adult who has more experiences, different kinds of experiences and experiences that are organized differently from those of the immature, offers a great potential in terms of learning. However, it is still necessary to make these experiences meaningful through a systematic and comprehensive program of adult education.

The Good Life

Philosophers, as well as others, disagree on what constitutes the Good Life in specific terms. However, there seems to be fairly general agreement on some of the factors involved in achieving the Good Life. These factors are of three types: (1) The psychological factors involved in achieving emotional maturity; (2) The intellectual-rational factors; and (3) The creative factors. The overall concept is that of achieving growth--emotional, intellectual and aesthetic. The individual is "at work on his own enlargement"--seeking to release his creative energies and realize his latent potentialities. The implications for adult education are threefold: (1) education for emotional maturity; (2) education for intellectual growth; and (3) education for aesthetic growth.

A number of psychologists and psychiatrists have noted that within each individual " . . . the ultimate driving force is the person's unrelenting will to come to grips with himself, a wish to grow and leave nothing untouched that prevents growth"--in a word, to achieve maturity. These same psychologists and psychiatrists have pointed out that achieving maturity is an educational process. It involves systematic and disciplined learning on the part of the individual--learning about himself, learning about others and learning about the world he lives in.

Education for intellectual growth can take a number of directions. Dewey and his followers would emphasize the problem-saving aspects of intellectual growth--making the adult a more sophisticated and enlightened problem-solver. On the other hand, Ralph Barton Perry, and those who are more in the academic-intellectual tradition, would focus on the liberating nature of intellectual growth. Perry puts it this way: "Education is liberal insofar as it invites and qualifies men to choose deeply and fundamentally, to choose ends as well as means, to choose remote as well as immediate ends, to choose from many rather than from few possibilities." Clearly, what both Dewey and Perry have in mind is that man "use his mind to the utmost, no holds barred." However, this will not be possible unless the adult accepts education as a way of life--unless he undertakes a systematic, sustained and disciplined program of life-long learning.

In this age of science, technology, the organization man, mass anonymity and increasing leisure, the aesthetic dimension of the Good Life is taking on an ever-increasing importance. The creative arts--painting, music, literature, etc.--are seen as avenues through which the individual can achieve a more meaningful existence. And yet the great mass of American adults remain content to concentrate on the vast cultural wasteland of television, the movies, "Mickey Spillane" and other forms of popular entertainment. The average adult needs guidance and direction in achieving aesthetic growth. This is one of the important challenges and opportunities that confronts American adult education.

Adult Responsibilities

Adults are confronted with a series of unique responsibilities. These responsibilities include that of: (1) worker, (2) marriage partner, (3) parent,

(4) consumer, (5) citizen and (6) member of the community. There are also a whole range of needs that adults strive to fulfill. These needs are related to the responsibilities noted above. They also involve the need to achieve emotional maturity and a meaningful type of existence. The implications for adult education are obvious. The relationship between continuing education and the fulfilling of our citizenship responsibilities has been discussed. The same type of relationship applies to the other adult responsibilities.

Vocational Competence

On-the-job or in-service training and the concept of learning by doing has always been of great importance. This is the area in which adult education has had its greatest success. It has been estimated that the factories and the business offices are the great centers of adult education in this country. The "hard-headed" businessman has long recognized that an individual cannot learn a job until he actually performs it. He has further recognized that the worker must be learning continually on-the-job; keeping up to date on the latest advances and constantly improving his job performance. The concept of continuing education has proved itself in industry and business on a purely economic basis (in terms of dollars and cents). It remains to be proved in those areas when social and human considerations are all-important.

Marital Competence

The spiralling divorce rate should be a dramatic enough indication of the need for continuing education in this area. However, even more tragic, perhaps, are the great number of marriages that stay together but are not in any sense creative. There are a number of ways in which adult education can make for more creative marriage relationships. For example, sex education and a better understanding of inter-personal relationships can provide a sound basis for a happy marriage. Engaging in lifelong learning together should provide the setting in which a marriage can grow and become more meaningful.

Parental Competence

Juvenile delinquency is usually pointed to as the great indicator that all is not well in many American homes. The difficulty is more subtle than than. It is my contention that the great majority of parents are not providing the type of environment in which their children can grow intellectually, aesthetically or emotionally. Too many parents are operating under the delusion that their children will be "educated" in the classroom. The truth is that children are educated in the home--they are educated by the attitudes and values of the parents. Thus, if parents are to accept their ultimate responsibility as the primary teachers of their children, they must be educated and accept education as a way of life. They must not only understand child and adolescent psychology; they must also know enough about literature, history, politics, etc., to give their children an understanding of our heritage and a love of learning. Once parents recognize the fundamental truth that the most significant learning of the immature takes place in the home, then they will begin to accept education as a way of life.

Economic Competence

One of the distinctive features of our society is that we have a laissez-faire type economy. This means that the consumer has the ultimate decision-making responsibility in determining what is produced, at what cost and in what quantities. The consumer "votes" in the market place, using money, for various commodities and various producers. Unless he "votes" in an intelligent way he will not gain the full benefit of our capitalistic system. Thus he needs to have some understanding of: (1) the basic economic concepts and principles (supply and demand analysis, marginal utility, etc.); and (2) up-to-date information on the products he wishes to purchase (as provided in Consumer Reports magazine and other publications).

The Need for Action

These themes underlie and underline the need for adult education in a free society.

It would seem that adult educators have an impressive case to make for adult education. And yet the facts belie this impression. Adult education is struggling for survival in a sometimes hostile, but more often apathetic social environment.

What can be done? There are a number of things that must be done--and soon. First, adult educators must articulate the rationale and purpose of adult education in a free society more systematically, more explicitly and in more depth than has been done in the past. Second, adult educators should rally to their support the enlightened and responsible members of the academic-intellectual community. Third, an intensive public relations program should be undertaken to educate: (1) the members of the adult education profession; (2) community and business leaders; (3) legislators and public officials; and (4) the general public to the crucial role that adult education has to play in our democratic society. And fourth, foundation and public financial support should be found that will make possible: (1) the development of adult education programs; (2) the conducting of research in adult education; (3) the maintenance of a continuing philosophical dialogue on the nature, purpose and rationale of adult education; and (4) the encouragement of outstanding individuals into the field of adult education.

APPENDIX C

Please accept our sincere thanks for your loyal cooperation and support in this study. The enclosed materials are the last that will be sent.

Please read the materials you have received carefully. After you have finished, fill out the enclosed attitude scale and return it immediately in the envelope provided.

Thank you,

Arthur Burrichter

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For each of the following statements please indicate with an (X) on the rating scale the position which most nearly reflects your opinion or position regarding the statement.

1. It is nearly impossible to change adult attitudes after 45-50 years of age.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

2. Elementary students (grades 1-6) are a little too young to become very concerned about lifelong education.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

3. Lifelong learning of one sort or another is essential or obsolescence takes over.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

4. Passing a test over material studied or reciting it back is evidence that learning has occurred.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

5. With advancing age it becomes increasingly difficult to learn new and unfamiliar materials or concepts.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

6. "Hard work" by an individual usually means he is learning well.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

7. Elementary school children (grades 1-6) should be taught certain concepts about the world of work.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

8. A few jobs require constant updating of skills while the majority of the population is "up to date" with a high school or college education.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

9. A child's learning is probably more meaningful to him than is learning to an adult.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

10. Given adequate motivation adults can master complex tasks as well as younger learners.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

11. An adult's ability to develop skills and understand concepts is generally less than children.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

12. Units or materials about lifetime occupations are very appropriately introduced in the elementary school. (grades 1-6)

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

13. Learning has best occurred when an individual can use it in unfamiliar or problem situations.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

14. Adults can learn as easily as the "younger set" even though the rate may be different.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

15. Learning can occasionally be "fun" but is usually pretty serious business.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

16. Strange as it seems, the higher the educational level one attains, the less apt he is to participate in continuing education.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

17. The idea that education is a lifelong process is too complex for elementary (grades 1-6) students.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

18. Adult education should receive general public support from tax monies just as we tax for pre-adult education.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

19. New insights are an effective reward for continuing learning.

:________:________:________:________:________:________:________:
Strongly agree Undecided Strongly disagree

20. Academic areas in the elementary school (grades 1-6) are the single most important phase of the total program of elementary education.

:_________:_________:_________:_________:_________:_________:_________:
Strongly agree Undecided Strongly disagree

21. When confronted with unfamiliar problems adults are likely to give answers quite as self-contradictory, inconsistent, and naive as children do.

:_________:_________:_________:_________:_________:_________:_________:
Strongly agree Undecided Strongly disagree

22. The churches, businesses, homes and schools of America are remaining havens of stability today.

:_________:_________:_________:_________:_________:_________:_________:

23. An individual in today's world can usually acquire in his youth the bulk of the knowledge and skill necessary to live adequately for the rest of his life.

:_________:_________:_________:_________:_________:_________:_________:
Strongly agree Undecided Strongly disagree

24. The principle that adult learning should be optional is basic to our democratic society.

:_________:_________:_________:_________:_________:_________:_________:
Strongly agree Undecided Strongly disagree

25. Such every day activities as child raising, food preparation and leisure time activities do not change much during a person's lifetime.

:_________:_________:_________:_________:_________:_________:_________:
Strongly agree Undecided Strongly disagree

26. Adult education programs should be financially supported in a manner similar to elementary and secondary education.

:_________:_________:_________:_________:_________:_________:_________:
Strongly agree Undecided Strongly disagree

THANK YOU FOR YOUR HELP!

PLEASE RETURN THIS SCALE IMMEDIATELY IN THE ENVELOPE PROVIDED

ERIC Clearinghouse
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